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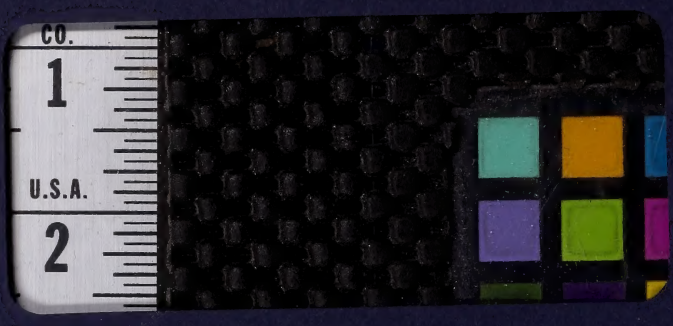
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Summary of Alberta Results from the 1988 Survey of 1986 Graduates

June, 1991

Alberta
CAREER DEVELOPMENT AND EMPLOYMENT
Labour Market Research & Information Branch
Policy and Research Division

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Executive Summary

In May, 1988, Statistics Canada surveyed graduates from Canadian universities, colleges, and trade/vocational institutes in order to examine their labour-market experiences two years after graduation. This report summarizes the results from the Alberta graduates in this survey and compares these results to those obtained from this survey's predecessor - the National Graduates Survey.[1]

The Alberta population of 1986 graduates was divided into four levels of certification: 1) Graduate (Masters Certificates, Masters Degrees and Doctorate Degrees); 2) Undergraduate (Bachelors and First Professional Degrees and Undergraduate Diplomas/Certificates); 3) College/Technical (graduates of programs one year or longer at colleges or technical institutes); 4) Trade/Vocational (graduates of skilled trades, (i.e. pre-employment programs), which normally are 3 months or more in duration).

1. The fields of study that individuals graduated from in 1986 had considerable impact on their labour-market outcomes. For example, at the Undergraduate Degree level, Engineering & Applied Science graduates fared well in the labour market; of all the fields of study at this certification level, they had the highest earnings and were most likely to be in permanent jobs related to their programs of study. In contrast, at the Graduate Degree level, Fine & Applied Arts graduates fared poorly in the labour market. They had the lowest earnings and were least likely to hold full-time, permanent jobs related to their programs of study.

2. For the most part, 1986 graduates, regardless of gender, shared similar labour-market experiences. Exceptions occurred in the areas of occupations, industries and earnings. Males and females were less likely to be employed in common occupations and industries at each successively lower level of certification; and males, at all levels of certification, earned more than females.

3. As in 1984, over 90 percent of graduates at all levels of certification participated in the labour force two years after graduation; and over 80 percent of graduates in the labour force were employed.

4. In both 1984 and 1988, the vast majority of graduates (over 90 percent), at all levels of certification, were paid workers.

5. In both 1984 and 1988, university graduates tended to be in professional occupations such as management and teaching, while College/Technical and Trade/Vocational graduates tended to be in supporting occupations such as clerical and service occupations. In addition, there was a tendency for graduates to be more dispersed across occupations and industries at each successively lower level of certification.

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[1] The National Graduates Survey was a 1984 survey of 1982 graduates.

6. While approximately 90 percent of 1984 and 1988 graduates were able to find full-time employment, they were less successful at finding permanent work, especially at the Undergraduate Degree level.

7. Graduate Degree holders enjoyed a competitive edge over other graduates in both 1984 and 1988 due to the fact that many of them had obtained jobs prior to graduating.

8. In both 1984 and 1988, Graduate Degree holders had by far the highest earnings of all graduates, and graduates from each successively lower level of certification earned less money.

9. In both 1984 and 1988, the majority of graduates were satisfied or very satisfied with their jobs and salaries. However, the proportion satisfied with their salaries (over 70 percent) was smaller than the proportion satisfied with their jobs (over 80 percent).

10. In 1988, approximately 80 percent of graduates, from all levels of certification, held jobs that were directly or partly related to their programs of study. In contrast, in 1984, the proportions of graduates in related jobs decreased at each successively lower level of certification.

11. In both 1984 and 1988, many graduates were overqualified for their jobs. In particular, over half of Graduate Degree holders had more education than was required for their jobs.

12. In both 1984 and 1988, Graduate Degree and Trade/Vocational graduates had the lowest and highest unemployment rates respectively. An analysis of unemployment by various demographic characteristics revealed that the clearest predictors of unemployment were previous unemployment and field of study; graduates who were unemployed 6 or 18 months after graduation were also much more likely than graduates who were employed during these periods to be unemployed two years after graduation; and arts graduates (Arts, Humanities or Fine & Applied Arts) had high unemployment rates at all levels of certification.

13. As in 1984, Undergraduate Degree holders had little previous labour-market experience; over 60 percent had attended high school prior to starting the programs from which they graduated in 1986.

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1.0 Introduction

In May 1988, on behalf of Employment and Immigration Canada (EIC), Statistics Canada conducted a survey of graduates from Canadian universities, colleges, and trade/vocational institutes. This survey (Survey of 1986 Graduates) is the most current in a series of surveys designed to examine the transition of recent graduates into the labour market.

The purpose of this report is two-fold: to provide a brief descriptive overview of the key findings of the Alberta data from the Survey of 1986 Graduates and to compare these findings to those obtained from this survey's predecessor - the 1984 National Graduates Survey.[1] Moreover, these results will provide an information base upon which labour market and/or educational planners can draw when formulating policy related to training/education and employment.

The report is structured as follows: Section 2.0 provides a summary of the background, purpose and methodology of the survey; Section 3.0 provides demographic and educational characteristics of the graduate population; and Sections 4.0 through 9.0 present the analyses of the survey results.

Further information on the data contained in this report may be obtained by contacting Robert Nicoll, Director, Labour Market Research and Information Branch, Policy and Research Division, Alberta Career Development and Employment.

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[1] The Survey of 1986 Graduates is a 1988 survey of 1986 graduates, while the National Graduates Survey is a 1984 survey of 1982 graduates.

2.0 Background

2.1 Historical Overview

Since 1978, Statistics Canada has conducted three surveys of graduates from Canadian post-secondary institutions. The first of these, conducted in 1978, was designed to glean pertinent information about the labour market experiences of 1976 graduates from Canadian universities and colleges. The survey focussed both on quantitative variables such as labour force status, earnings, job search strategies and mobility patterns and on subjective assessments such as satisfaction with current job and past educational choices.

Because the recession of 1982 caused high unemployment rates, especially among the youth segment of the labour force, Statistics Canada decided to repeat the study to determine, among other things, the effect of the recession on 1982 graduates. This new survey (The 1984 National Graduate Survey) broadened the scope of its 1978 predecessor by expanding both the population of interest and questionnaire content. The target population was amended to include trade/vocational school as well as university and college graduates while factors that were most affected by the recession were explored in greater detail.

The Survey of 1986 Graduates, sponsored by Employment and Immigration Canada (EIC), retained comparability with the National Graduate Survey both in questionnaire content and population of interest. Because of this, the opportunity exists to compare the experiences of two sets of graduates at the same point in their careers. Specific content of both surveys focussed on labour force status and activities, field of study of the graduates, occupations entered and satisfaction with those occupations' duties and salaries, and a variety of demographic characteristics.

2.2 Purpose

In general, the aim of all three surveys has been to provide information about the integration of graduates into the labour market. This information is especially critical in this time of market restructuring where the economy is moving from a goods-producing to a service-producing economy. Given that many jobs in the service sector require highly educated and skilled labour, it is crucial that the supply of graduates can fill this demand so that both the economy and graduates may accrue the economic benefits.

2.3 Survey Objectives

The specific objectives of the Survey of 1986 Graduates included:

1. Obtaining information for labour-market analysis of a key youth group at a key time, focussing on employment, occupation and geographic shifts. These data and analyses will be useful for policy development with respect to education/training and the labour market.

2. Obtaining information on the relationship between education/training and labour market experiences and the exposure of graduates to additional training in general and the Canadian Job Strategy programs in particular.

3. Extending available information required to improve occupational supply and demand projection models and to conduct related studies of supply-demand imbalances in the labour market.

4. Obtaining data regarding longer-term labour-market experiences of graduates, with special emphasis on employment and occupations, for use in counselling on careers and post-secondary education course selection.

2.4 Survey Population and Subpopulations

The survey population included all graduates from Canadian post-secondary institutions who completed the requirements[2] for a degree, certificate or diploma in the calendar year 1986, and who were living in Canada at the time of the survey. This population was in turn comprised of 60 subpopulations composed of five levels of certification across the ten provinces and two territories. The five certification levels are: 1) doctorate 2) masters (degrees, diplomas and certificates) 3) undergraduate (degrees, diplomas and certificates) 4) college and 5) skilled trades. The population excluded graduates from private post-secondary educational institutions (e.g., commercial secretarial schools), those who completed continuing education courses unless these led to degrees or regular diplomas or certificates, persons who took part-time trade courses while employed full-time, persons who completed vocational programs that lasted less than three months or that were in areas other than skilled trades, and persons in apprenticeship programs. Table 2.1 below shows the Alberta post-secondary educational institutions that contributed to the subpopulations.

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2 The question asked was "Did you write the last exam or submit the last paper, report or project or defend your thesis?"

Table 2.1
Alberta Post-Secondary Institutions Included in the
Survey of 1986 Graduates

Subpopulations	Source Post-Secondary Educational Institutions
Doctorate, Masters and Undergraduate Graduates	University of Alberta, University of Calgary, University of Lethbridge, Athabasca University, Canadian Union College, Camrose Lutheran College, Newman Theological College
College/Technical Institute Graduates*	**Colleges:** Alberta College of Art, Fairview College, Grande Prairie Regional College, Grant MacEwan Community College, Keyano College, Lakeland College, Lethbridge Community College, Medicine Hat College, Mount Royal College, Olds College, Red Deer College **Technical Institutes:** Northern Alberta Institute of Technology, Southern Alberta Institute of Technology, Westerra **Teaching Hospitals:** Cross Cancer Institute, Foothills Hospital, Misericordia Hospital, Royal Alexandra Hospital, University of Alberta Hospital
Trade/Vocational Institute Graduates	**Alberta Vocational Centres:** Calgary, Edmonton, Grouard, Lac La Biche **Colleges:** Fairview College, Grande Prairie Regional College, Keyano College, Lakeland College, Lethbridge Community College, Medicine Hat College, Olds College, Red Deer College

*College/Technical Institutes were referred to as Career/Technical Institutions in the survey.

2.5 Methodology

Samples were drawn from the subpopulations with large proportions of graduates drawn from small categories and small proportions of graduates drawn from large categories. However, given that users of the data are interested in the characteristics of the population of graduates, not the sample of graduates, weights were supplied in the data file to produce numbers that would approximate the original population. These weights

were then applied to each record to determine how many other graduates that record represented. In short, the weighting procedure functions to estimate the total number of graduates in the population or chosen subpopulation. Table 2.2 below indicates the subpopulations and their corresponding sample sizes for both Alberta and Canada.

Table 2.2
Survey of 1986 Graduates
Populations and Samples Summary

Certification Level	Total 1986 Graduates	Selected Sample	Responding Sample	Domain of Interest[3]	Domain as % of Selected Sample
Alberta					
Graduate*	1,588	924	830	661	72%
Undergraduate	8,182	2,777	2,401	2,245	81%
College/Technical	8,497	3,290	2,738	2,616	80%
Trade/Vocational**	2,632	1,233	947	842	68%
Total	**20,899**	**8,224**	**6,916**	**6,364**	**77%**
Canada					
Graduate*	18,440	9,780	8,272	6,740	69%
Undergraduate	115,843	14,777	12,846	11,857	80%
College/Technical	89,162	16,100	13,758	13,080	81%
Trade/Vocational**	45,208	12,479	10,269	9,137	73%
Total	**268,653**	**53,136**	**45,145**	**40,814**	**77%**

* Includes Masters and Doctorate Degrees
**Apprenticeship not included

2.6 Data Collection and Processing

Data were collected in Statistics Canada's regional offices by telephone interview between May 9 and June 23, 1988. Two separate questionnaires were used - one for university and college/technical institute graduates and one for trade/vocational graduates. As expected, the response rate (those who completed a full or partial interview) was high at 77 percent for both the Canadian and Alberta samples.

Data were subsequently captured, edited, and coded on minicomputers at Statistics Canada's regional offices. Finally, the edited data tape containing two microdata files (one containing the university and college/technical institute data and one containing the trade/vocational data) was sent to various parties for analysis. This tape provided the basis for the analyses of the Alberta data presented in this report.

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[3] Refers to graduates who were still living in Canada in May-June, 1988 and provided complete or partial information. It excludes graduates who were no longer living in Canada or graduates who graduated with more than one degree, diploma or certificate in 1986 (*Survey of 1986 Graduates: Survey Methodology Report and Users Guide*, Appendix B).

2.7 Interpretation of Survey Results

The results in this report have been carefully edited to ensure conformance with Statistics Canada's publication and release policy guidelines. These guidelines stipulate that only estimates that fall within a specified range on the supplied crude variability tables may be released. These estimates are of two types: unqualified estimates, which may be considered completely reliable, and qualified estimates which must be interpreted with caution because of the small cell sizes that they represent. The results presented in this report are unqualified estimates unless otherwise noted.

3.0 Graduate Population Profile

3.1 Demographic Profile

3.1.1 Age

Table 3.1 below shows the ages of 1982 and 1986 graduates. At graduation in 1986, Graduate Degree holders were the oldest graduates with an average age of 34. Trade/Vocational graduates followed closely behind with an average age of 29. The average ages of Undergraduate Degree and College/Technical graduates were 25 and 24 years of age respectively.

The 1982 graduates were of similar average ages. Graduates Degree holders were again the oldest graduates while College/Technical graduates were the youngest. Trade/Vocational graduates, however, were considerably younger in 1982 than in 1984.

Table 3.1
Age at Graduation
1982 and 1986

Age	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
1982				
24 or less	5.3	60.9	77.6	61.7
25 - 29	34.1	23.3	11.1	12.0
30 - 34	25.1	6.9	5.0	11.1
35-39	17.7	3.8	2.6	4.8
40 - 44	8.2	3.0	1.6	4.7
45+	9.6	2.1	2.0	5.8
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**861**	**6,279**	**5,824**	**1,127**
Mean Age	**33**	**26**	**24**	**26**
Median Age	**31**	**23**	**21**	**23**
1986				
24 or less	3.6	63.9	68.9	38.7
25 - 29	31.7	20.2	15.4	22.0
30 - 34	27.6	8.3	7.6	16.1
35 - 39	19.1	3.7	4.3	12.2
40 -44	9.3	2.2	1.8	6.2
45+	8.6	1.7	2.0	4.8
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,248**	**7,361**	**7,827**	**2,258**
Mean Age	**34**	**25**	**24**	**29**
Median Age	**32**	**23**	**22**	**27**

3.1.2 Gender

As shown in Table 3.2, the distribution of females and males was virtually equal at all levels of certification. However, with the exception of the Graduate Degree level, females accounted for slightly more of the graduates at all levels. Beginning at the Graduate Degree level and ending at the Trade/Vocational level, the proportions of female graduates were as follows: 48 percent, 53 percent, 54 percent, and 55 percent.

Table 3.2
Gender of Graduates by Certification Level
1984 and 1988

Gender	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Male	59.6	48.2	44.7	43.1
Female	40.4	51.8	55.3	56.9
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**852**	**6,219**	**5,801**	**1,121**
May, 1988				
Male	51.9[4]	47.1	45.6	45.5
Female	48.1	52.9	54.4	54.5
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,326**	**7,682**	**7,658**	**2,515**

3.1.3 Marital Status

As indicated in Table 3.3, Graduate Degree holders were the most likely to be married (70 percent), followed by Trade/Vocational Graduates (51 percent), and finally Undergraduate Degree and College/Technical graduates at 38 and 35 percent respectively. These findings are in accord with findings on average age; that is, the older the graduate, the more likely it is that s/he is married.

[4] Because of the high rate of non-response at the Doctoral level, and because weighting did not correct for gender mix, these percentages may not reflect the gender breakdown of the actual population.

Table 3.3
Marital Status by Certification Level
1984 and 1988

Marital Status	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Married	67.8	39.7	28.3	33.8
Single*	27.1	55.8	67.7	54.4
Separated/Divorced	5.1	4.4	3.7	11.5
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**861**	**6,279**	**5,824**	**1,127**
May, 1988				
Married	69.8	38.4	35.4	51.4
Single*	21.6	58.2	60.3	36.2
Separated/Divorced	7.5	3.3	4.1	12.0
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,296**	**7,607**	**8,007**	**2,299**

* Never married

3.1.4 Dependent Children

Not surprisingly, there was a general trend for older graduates to have more children. On average, Trade/Vocational graduates had the greatest number of children (1.0 children per graduate). Graduate Degree holders closely approximated this number (0.8 children per graduate), while both College/Technical and Undergraduate Degree graduates had considerably fewer children per graduate (0.4 and 0.3 respectively). This trend closely parallels that found in the 1984 data where, on average, Graduate Degree and Trade/Vocational graduates had fewer children per graduate than their Undergraduate Degree and College/Technical counterparts.

3.2 Education Profile

3.2.1 Field of Study

The field of study categories used in this report were derived from the five-digit USIS (University Student Information System) and CCSIS Community College Student Information System) codes that represent all possible programs of study in the university and college systems. The categories, however, are not directly comparable. Therefore, the analysis of chosen fields of study is presented in two sections: one on university graduates, and one on College/Technical and Trade/Vocational graduates.

a) Universities

As indicated in Table 3.4 and Figure 3.1, the top two fields of study for both Graduate and Undergraduate Degree holders were Education and Social Science. In fact, these two fields of study accounted for over half of the graduates at both certification levels

(61 percent and 56 percent of Graduate and Undergraduate Degree holders respectively). These results parallel those found in the 1984 data. Moreover, as indicated in Figure 3.1, the top four fields of study, accounting for over 75 percent of graduates, were virtually identical in both years. The one change occurred at the Undergraduate level, where Engineering & Applied Science, one of the top four fields in 1984 , dropped out of this group in the 1988 reference period.

Table 3.4
Field of Study - Universities
1984 and 1988

Field of Study	Graduate Degrees (%)		Undergraduate Degrees (%)	
Universities	1984	1988	1984	1988
Education	31.3	32.6	19.3	24.7
Fine & Applied Arts	11.7	14.8	10.5	13.1
Social Science	29.6	28.8	34.8	30.9
Agriculture & Biological Science	4.9	3.7*	5.0	5.5
Engineering & Applied Science	10.9	9.1	10.6	8.7
Health Sciences	5.1	4.6	14.0	11.1
Math & Physical Sciences	6.5	6.5	5.8	5.9
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**838**	**1,178**	**6,006**	**7,140**

* Percentage may not be reliable due to small cell size

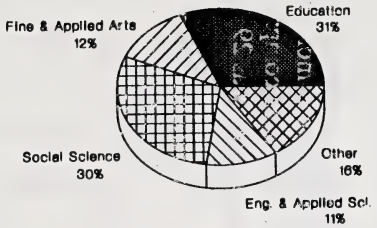
Table 3.5 shows that these patterns also hold when the 1988 data are examined by gender. That is, Education and Social Science were the most frequently chosen fields of study for both certification levels regardless of gender. However, the gender distribution within these fields is not uniform. Females were overrepresented in Education and underrepresented in the Social Sciences. At the Graduate Degree level, Education accounted for 33 percent of all graduates, 32 percent of them male and 68 percent of them female.[5] Graduates in the Social Sciences were more evenly distributed; males comprised 60 percent of this category whereas females comprised 40 percent. The total proportion of graduates accounted for by this category was 29 percent.

The same patterns are exemplified at the Undergraduate Degree level. Here, Education accounted for 25 percent of all graduates, 34 percent of them male and 66 percent of them female. Social Science graduates comprised 31 percent of total graduates. Of these, 51 percent were male and 49 percent were female.

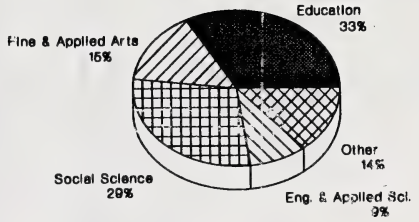
5 The proportions of the genders within the categories are derived from the figures in Table 3.5. For instance, in determining the proportion of male graduates in Education, the 20.3 percent of the total 600 male graduates represents 122 male graduates which in turn comprise 32 percent of all Education graduates.

Figure 3.1
Top University Fields of Study - 1984 and 1988

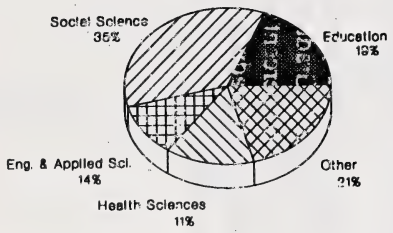
Graduate Degrees - 1984



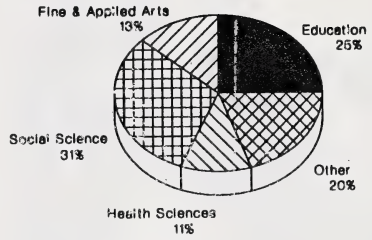
Graduate Degrees - 1988



Undergraduate Degrees - 1984



Undergraduate Degrees - 1988



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

Table 3.5
Field of Study by Gender - Universities

Field of Study Universities	Graduate Degrees (%)		Undergraduate Degrees (%)	
	Male	Female	Male	Female
Education	20.3	45.5	18.0	30.6
Fine & Applied Arts	11.8	17.7	10.6	15.3
Social Science	34.0	23.4	33.8	28.4
Agriculture & Biological Science	--	--	4.6	6.4
Engineering & Applied Science	16.5	--	17.0	1.4*
Health Sciences	--	5.7	6.6	15.0
Math & Physical Sciences	9.7	--	9.4	3.0
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**600**	**576**	**3,314**	**3,826**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

b) College/Technical and Trade/Vocational Institutes

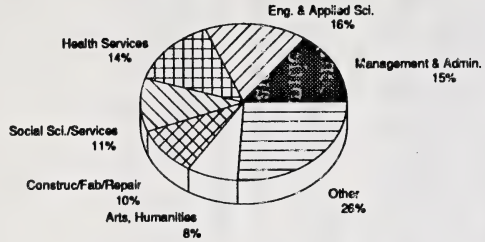
Whereas graduates from the university system tended to cluster in four fields of study, graduates from the College/Technical and Trade/Vocational certification levels were more evenly distributed.

As indicated in Table 3.6 and Figure 3.2, at the College/Technical level, 74 percent of graduates were concentrated in six fields of study: Health Services (15 percent), Social Services/Sciences (14 percent), Engineers & Applied Science (12 percent), Management & Administration (12 percent), Construction/Fabrication/Repair (11 percent), and Secretarial/Clerical (10 percent). With the exception of the Secretarial/Clerical category, these were also the top six fields of study in the 1984 data.

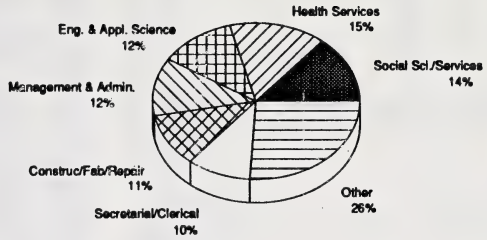
At the Trade/Vocational level, four fields of study accounted for 69 percent of graduates. These were: Construction/Fabrication/Repair (23 percent), Secretarial/Clerical (20 percent), Health Services (15 percent), and Arts, Humanities (11 percent). Figure 3.2 shows that, with the exception of the Arts, Humanities category, these were also the top fields of study in the 1984 data.

Figure 3.2
Top Fields of Study - 1984 and 1988

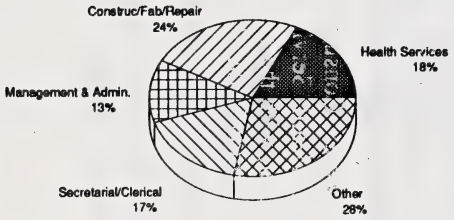
College/Technical - 1984



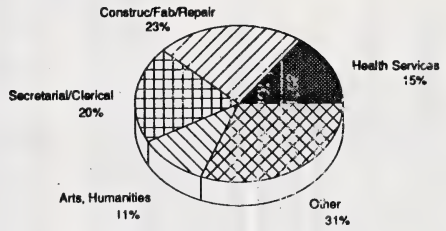
College/Technical - 1988



Trade/Vocational - 1984



Trade/Vocational - 1988



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

Table 3.6
Field of Study - College/Technical and Trade/Vocational Institutes
1984 and 1988

Field of Study College/Technical Trade/Vocational	College/ Technical (%)		Trade/ Vocational (%)	
	1984	1988	1984	1988
Arts, Humanities	8.4	8.6	1.0	11.2
Health Services	13.8	14.9	17.9	15.4
Engineers & Applied Science	15.5	12.2	9.8	9.4
Computing Science	2.6	2.6	1.1	--
Construction/Fabrication/Repair	10.3	10.9	23.7	22.6
Agriculture & Related	4.4	5.0	6.0	1.6*
Resource Technology	5.9	4.9	0.9	--
Social Sciences/Services	10.9	14.3	7.2	6.1
Secretarial/Clerical	7.5	10.2	17.2	19.8
Management & Administration	14.8	12.0	12.7	9.0
Sales & Service	5.8	4.3	2.6	3.8
Total Percentage	100.0	100.0	100.0	100.0
Number of Graduates	**5,848**	**8,277**	**1,133**	**2,509**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

However, when these fields of study are examined by gender, radically different patterns than those found in the university category emerge. Table 3.7 shows that at the College/Technical level, females and males shared none of the top three fields of study. The top two male fields of study, accounting for 45 percent of all male graduates, were Engineers & Applied Science and Construction/Fabrication/Repair. The proportions of female graduates in these areas were 3 and 1 percent respectively. The top two fields of study for females were Health Services and Social Sciences/Services accounting for 44 percent of all female graduates. The corresponding percentages for males in these categories were 4 and 9 percent respectively.

At the Trade/Vocational level, females and males again shared none of the top three fields of study. The top male field of study was Construction/Fabrication/Repair. In fact, this field accounted for virtually half of all male graduates. Females were extremely poorly represented in this category; their numbers were so low that they did not even meet releasability criteria. The top field of study for females, accounting for 35 percent of graduates, was the Secretarial/Clerical field. Not surprisingly, males were poorly represented in this area, again exhibiting numbers so low that they did not meet releasability criteria.

Table 3.7
Field of Study by Gender - College/Technical and Trade/Vocational Institutes

Field of Study	College/ Technical (%)		Trade/ Vocational (%)	
College/Technical Trade/Vocational	Male	Female	Male	Female
Arts, Humanities	6.8	10.5	18.2	5.3
Health Services	3.8	25.0	4.7*	24.2
Engineers & Applied Science	22.8	2.7	15.4	4.5*
Computing Science	3.4	1.8	--	--
Construction/Fabrication/Repair	22.3	1.3*	47.6	--
Agriculture & Related	6.1	4.4	2.8*	--
Resource Technology	9.3	1.3*	--	--
Social Services	8.7	19.3	--	9.1
Secretarial/Clerical	--	18.2	--	35.2
Management & Administration	11.7	11.7	--	14.9
Sales & Service	4.3	3.8	3.8*	3.8*
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**3,488**	**4,170**	**1,139**	**1,370**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

3.2.2 Major Activity Prior to Program of Studies

As seen in Table 3.8, the major activities of graduates before enrolling in their given programs of study varied according to certification level. In May 1988, the majority of Graduate Degree holders (68 percent) were working while the majority of Undergraduate Degree holders were going to school (61 percent). At the College/Technical level, roughly an equal proportion were working (49 percent) as going to school (40 percent). Approximately half of Trade/Vocational graduates were working. However, a substantial number, especially as compared to other certification levels, were looking for work. These general trends were also exemplified in the 1984 data. However, it is noteworthy that substantially fewer graduates were looking for work in 1984 than in 1988.

Table 3.8
Major Activity Twelve Months Before
Enrolling in Program of Studies
1984 and 1988

Major Activity 12 Months Before Program of Studies	Graduate Degrees (%)	Undergrad Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Working	62.5	33.2	50.7	58.9
Going to School	32.2	61.9	43.0	20.6
Looking for Work	0.9	0.6	0.8	5.5
Household Responsibilities	2.9	2.1	4.4	13.4
Other	1.4	2.2	1.2	1.7
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**861**	**6,288**	**5,834**	**1,129**
May, 1988				
Working	68.0	34.0	49.2	53.4
Going to School	26.0	60.9	40.0	16.7
Looking for Work	--	1.4	4.9	14.7
Household Responsibilities	3.0*	1.9	4.3	14.0
Other	--	1.9	1.6	--
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,297**	**7,637**	**8,062**	**2,310**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

4.0 Labour Force Participation of 1986 Graduates in May, 1988 (Approximately Two Years After Graduation)

As in the June, 1984 reference period, graduates from all four certification levels continued to show a high rate of participation in the labour market. As seen in Table 4.1 and Figure 4.1 below, over 90 percent of graduates at all four levels of certification participated in the labour force in May, 1988. College/Technical Institute graduates exhibited the highest participation rate (96 percent), followed by Trade/Vocational and Undergraduate Degree graduates with a rate of 94 percent. Graduate Degree holders had the lowest participation rate at 93 percent.

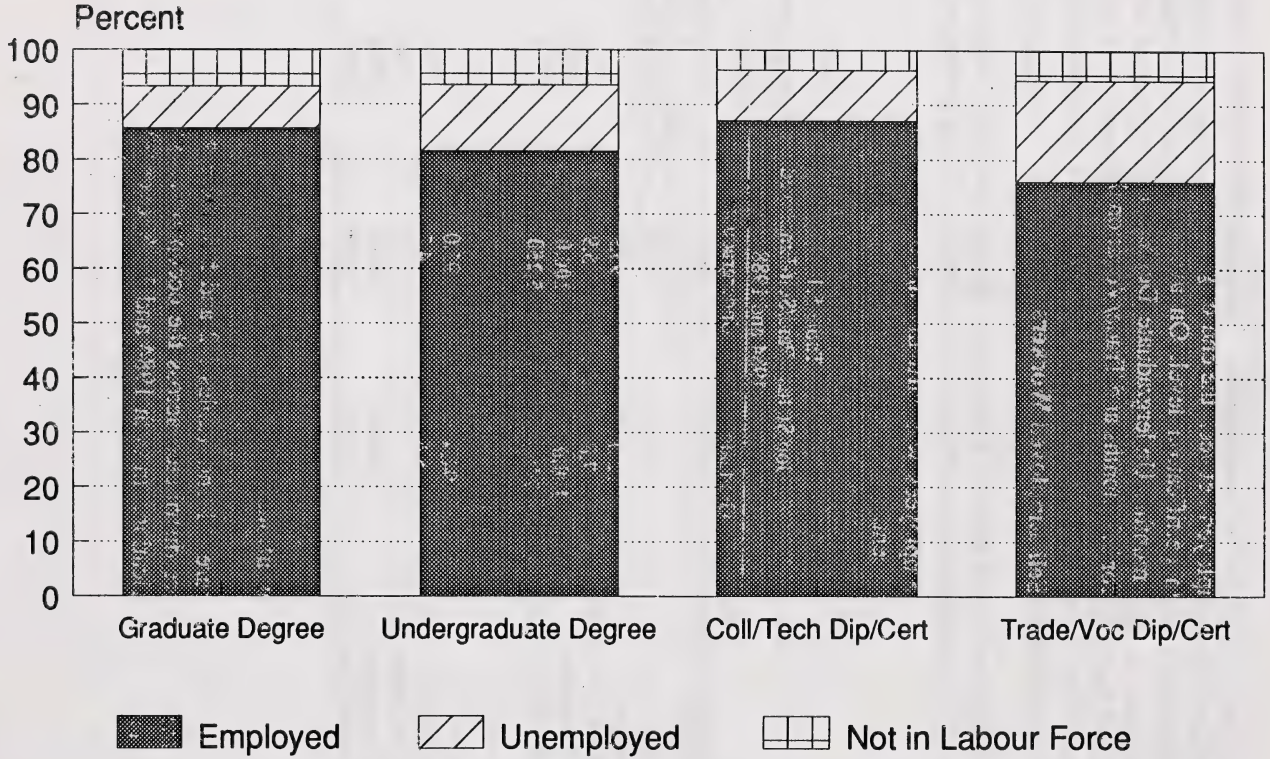
These rates are higher than the participation rate for Albertan workers in a similar age group. The participation rate in May, 1988 for the 25 - 34 age group was 87 percent[6].

Table 4.1
Labour Force Status
Approximately Two Years After Graduation - 1984 and 1988

Labour Force Status	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Employed	86.7	83.9	88.0	75.5
Unemployed	7.6	8.1	7.9	18.0
Not in the Labour Force	5.8	8.0	4.1	6.5
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**865**	**6,288**	**5,831**	**1,119**
May, 1988				
Employed	85.6	81.5	87.1	76.0
Unemployed	7.7	12.1	9.2	18.5
Not in the Labour Force	6.6	6.4	3.7	5.4
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,303**	**7,628**	**8,057**	**2,304**

6 Statistics Canada 71-001, *The Labour Force*, May 1988.

Figure 4.1
Labour Force Status
May, 1988



Source: Survey of 1986 Graduates
Alberta Data

5.0 Characteristics of Graduates Employed in May, 1988[7]

With the exception of Trade/Vocational graduates, over 80 percent of graduates at all levels of certification were employed in May, 1988. The average number of months that a graduate was unemployed between the end of graduation and his or her May, 1988 job varied inversely with certification level. On average, Graduate Degree holders were unemployed for 2.9 months, Undergraduate Degree holders for 3.0 months, College/ Technical graduates for 3.7 months and Trade/Vocational graduates for 5.5 months.

5.1 Paid/Self-Employed Workers

As in the 1984 reference period, more than 90 percent of graduates at all levels of certification were paid employees. Moreover, as indicated in Table 5.1 below, the percentage of paid employees was virtually uniform across the certification levels at between 94 and 96 percent.

Table 5.1
Job Status - Paid/Self-Employed
1984 and 1988

Paid/ Self-Employed	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Paid Worker	92.0	93.9	94.5	93.8
Self-Employed	7.8	5.9	5.5	6.2
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**746**	**5,250**	**5,098**	**837**
May, 1988				
Paid Worker	94.4	95.0	95.5	93.9
Self-Employed	5.6	4.7	4.3	5.9
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,150**	**6,553**	**7,230**	**1,820**

5.2 Occupations

As indicated in Figure 5.1 and Tables 5.2 and 5.3, there was a tendency for university graduates to be more distributed across the occupational spectrum at each successively lower level of certification. In both 1984 and 1988, over 90 percent of Graduate Degree holders were concentrated in four occupations: Teaching & Related, Managerial, Administrative & Related, Natural Sciences, Engineering, Mathematics, and Social Sciences. At the Undergraduate Degree level, Teaching & Related was again the most frequently held occupation. However, these graduates were more distributed across occupations than were their Graduate Degree counterparts; over 85 percent of them were

[7] Unless otherwise specified, the data on employed graduates are based on all employed individuals, including those self-employed.

concentrated in the following six occupations: Teaching & Related, Natural Sciences, Engineering, Mathematics, Managerial, Administrative & Related, Medicine & Health, Social Sciences, and Clerical & Related.

Table 5.2
Occupations (Standard Occupational Classification) of University Graduates
June, 1984 and May, 1988

	Graduate Degrees (%)		Undergraduate Degrees (%)	
Occupation	1984	1988	1984	1988
Managerial, Administrative & Rel.	24.6	20.9	12.5	14.0
Natural Sciences, Engineer., Math.	20.6	16.3	18.0	13.5
Social Sciences	14.8	14.7	11.3	9.5
Religion	--	--	--	--
Teaching & Related	31.2	38.9	23.4	26.7
Medicine & Health	2.5	--	15.2	12.8
Artistic/Literary/Recreation & Rel.	1.5	2.8*	--	1.9*
Clerical & Related	1.8	--	6.5	8.3
Sales	1.1	--	3.4*	4.2
Service	1.1	--	3.0*	0.8*
Farming, Horticultural	--	--	--	--
Fishing , Trapping & Related	--	--	--	--
Forestry & Logging	--	--	--	--
Mining, Quarrying Incl. Oil & Gas	--	--	--	--
Processing	0.2	--	--	--
Machining & Related	--	--	--	--
Fabricating/Assembly/Repairing	--	--	--	--
Construction Trades	0.7	--	--	0.8*
Transportation Equip. Operating	--	--	--	0.7*
Material Handling & Related	--	--	--	--
Other Crafts & Equipment	--	--	--	--
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Total Graduates	**743**	**1,144**	**5,357**	**6,548**

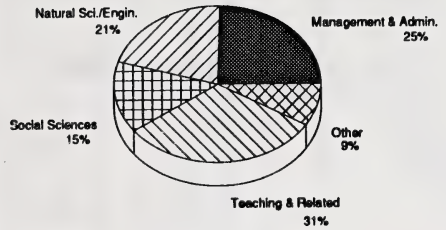
* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

Table 5.3 shows that at the College/Technical level, graduates were even more dispersed; as shown in Figure 5.2, just over 70 percent of graduates were concentrated in their top six occupations. Beginning with the most frequently held, these were: Clerical & Related, Medicine & Health, Managerial, Administrative & Related, Service, Natural Sciences, Engineering, Mathematics, and Fabricating/Assembly/Repairing. Clerical & Related was also the most frequently held occupation at the Trade/Vocational level. This was followed by: Medicine & Health, Service, Managerial, Administrative & Related, Fabricating/Assembly/Repairing, and Construction. Together, these six occupations accounted for roughly three quarters of Trade/Vocational graduates.

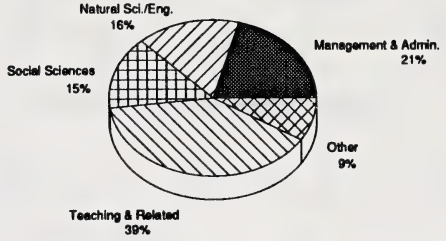
Not surprisingly, University graduates tended to be in professional occupations such as management and teaching, while College/Technical and Trade/Vocational graduates tended to be in supporting occupations such as clerical and service occupations.

Figure 5.1
Top University Occupations - 1984 and 1988

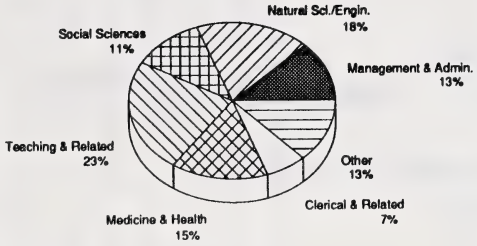
Graduate Degrees - 1984



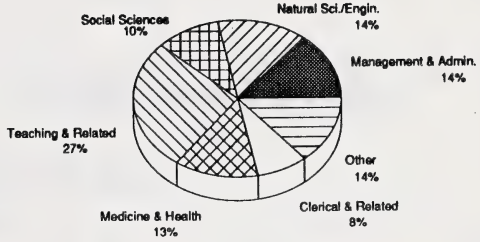
Graduate Degrees - 1988



Undergraduate Degrees - 1984



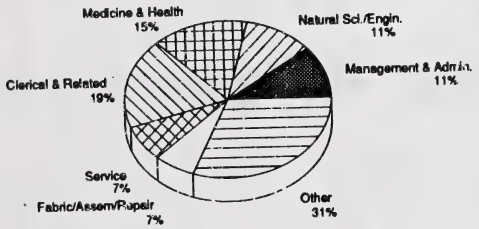
Undergraduate Degrees - 1988



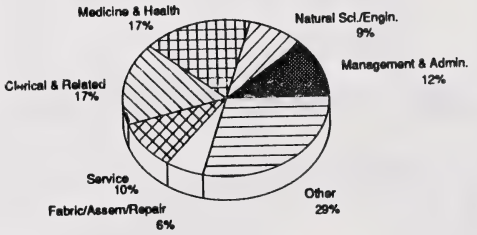
Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

Figure 5.2
Top Occupations - 1984 and 1988

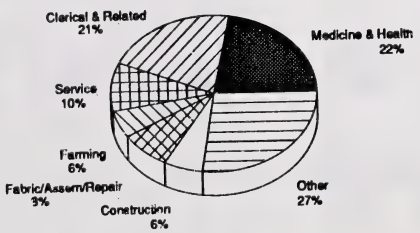
College/Technical - 1984



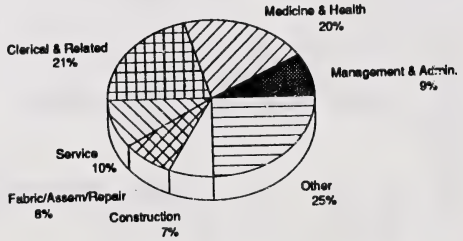
College/Technical - 1988



Trade/Vocational - 1984



Trade/Vocational - 1988



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

Table 5.3
Occupations (Standard Occupational Classification)
of College/Technical and Trade/Vocational Graduates
June, 1984 and May, 1988

	College/Technical (%)		Trade/Vocational (%)	
Occupation	1984	1988	1984	1988
Managerial, Administrative & Rel.	10.8	11.6	--	9.3
Natural Sciences,Engineer., Math.	10.9	9.4	--	3.2*
Social Sciences	3.2*	4.3	--	--
Religion	--	--	--	--
Teaching & Related	3.1*	3.2	--	--
Medicine & Health	15.1	16.5	22.3	20.2
Artistic/Literary/Recreation & Rel.	4.0	4.7	--	--
Clerical & Related	18.5	16.8	20.8	21.4
Sales	6.1	4.7	--	2.8*
Service	7.4	9.7	10.0	9.5
Farming, Horticultural	3.7	3.0	5.6*	1.7*
Fishing , Trapping & Related	--	--	--	--
Forestry & Logging	--	0.8*	--	--
Mining, Quarrying Incl. Oil & Gas	--	0.7*	--	--
Processing	2.0*	1.2	5.3*	2.5*
Machining & Related	--	--	--	--
Fabricating/Assembly/Repairing	6.5	6.2	7.9	8.3
Construction Trades	3.8	3.2	6.2*	7.4
Transportation Equip. Operating	--	1.2	--	2.7*
Material Handling & Related	--	0.6*	--	--
Other Crafts & Equipment	1.6*	1.7	--	4.0
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**5,103**	**7,113**	**855**	**1,761**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

5.2.1 Occupations by Gender

An analysis of occupations by gender revealed that graduates fell into two groups: those in which the most frequently held occupations tended to be the same for both women and men, and those in which the most frequently held occupations were different for women than they were for men. An examination of the top three occupations of each certification level shows that, at the university level, women and men shared two of their top three occupations: Teaching & Related and Managerial, Administrative & Related (Table 5.4). However, one of the top three occupations for men was Natural Science, Engineering, Math at both the Graduate and Undergraduate Degree level, while one of the top three occupations for women was Social Sciences at the Graduate Degree level and Medicine & Health at the Undergraduate Degree level. It is important to note, however, that while Social Sciences and Medicine & Health were not top occupations for men, men were reasonably well-represented in these categories. However, the converse is not true; women were not well-represented in the Natural Sciences, Engineering, Mathematics category.

Table 5.4
May, 1988 Occupations of University Graduates
By Gender

Occupation	Graduate Degrees (%)		Undergraduate Degrees (%)	
	Male	Female	Male	Female
Managerial, Administrative & Rel.	21.3	20.4	15.3	12.8
Natural Sciences, Engineer., Math.	27.0	--	22.1	5.8
Social Sciences	10.7	19.0	8.9	10.1
Religion	--	--	--	--
Teaching & Related	29.6	48.9	19.4	33.2
Medicine & Health	--	--	8.4	16.7
Artistic/Literary/Recreation & Rel.	--	--	1.5	2.3*
Clerical & Related	--	--	5.5	10.8
Sales	--	--	6.3	2.3*
Service	--	--	4.3	4.2
Farming, Horticultural	--	--	--	--
Fishing, Trapping & Related	--	--	--	--
Forestry & Logging	--	--	--	--
Mining, Quarrying Incl. Oil & Gas	--	--	--	--
Processing	--	--	--	--
Machining & Related	--	--	--	--
Fabricating/Assembly/Repairing	--	--	--	--
Construction Trades	--	--	--	--
Transportation Equip. Operating	--	--	1.6*	--
Material Handling & Related	--	--	--	--
Other Crafts & Equipment	--	--	--	--
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**793**	**555**	**3,100**	**3,448**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

As shown in Table 5.5, at the College/Technical level, women and men shared only one of their top three occupations - Managerial, Administrative & Related. The other top two occupations for women were Medicine & Health, and Clerical & Related. The analogous occupations for men were Natural Science, Engineering, Mathematics, and Fabricating/Assembly/Repairing. Complete occupational segregation occurred at the Trade/Vocational level. The top three occupations for men, in descending order, were: Fabricating/Assembly/Repairing, Construction and Managerial, Administrative & Related, while the top three occupations for women were Clerical & Related followed by Medicine & Health, and Service.

Table 5.5
May 1988 Occupations of College/Technical and Trade/Vocational Graduates by Gender

	College/Technical (%)		Trade/Vocational (%)	
Occupation	Male	Female	Male	Female
Managerial, Administrative & Rel.	12.9	10.6	8.9	9.7
Natural Sciences, Engineer., Math.	15.6	4.4	5.6*	--
Social Sciences	1.9	6.2	--	--
Religion	--	--	--	--
Teaching & Related	1.5*	4.6	--	--
Medicine & Health	3.6	27.7	5.4*	32.4
Artistic/Literary/Recreation & Rel.	4.7	4.6	--	--
Clerical & Related	6.6	25.1	4.8*	35.1
Sales	5.7	3.8	--	3.4*
Service	10.4	9.0	8.6	10.2
Farming, Horticultural	5.2	1.3*	--	--
Fishing , Trapping & Related	--	--	--	--
Forestry and Logging	1.6*	--	--	--
Mining, Quarrying Incl. Oil & Gas	1.7*	--	--	--
Processing	2.1*	--	5.1*	--
Machining & Related	--	--	--	--
Fabricating/Assembly/Repairing	12.6	--	17.9	--
Construction Trades	7.0	--	16.5	--
Transportation Equip. Operating	2.3*	--	5.3*	--
Material Handling & Related	1.2*	--	--	--
Other Crafts & Equipment	2.6	0.8	8.1	--
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**3,074**	**3,689**	**793**	**968**

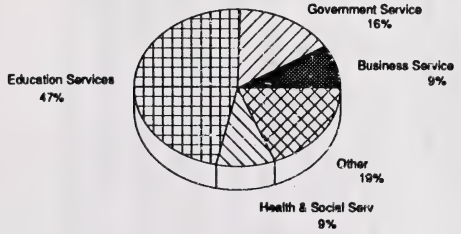
* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

5.3 Industries

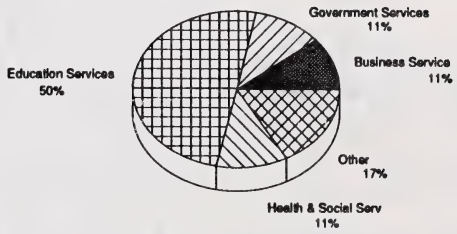
The trend of graduates from lower certification levels to be more dispersed across the occupational spectrum was borne out to some extent in the industry data. Table 5.6 and Figure 5.3 show that both Graduate Degree and Undergraduate Degree holders shared the same top four industries: Education Service, Health and Social Service, Government Service and Business Service. In 1988, these industries accounted for 83 percent of Graduate Degree holders and 70 percent of Undergraduate Degree holders. Moreover, as shown in Figure 10, these were also the top four industries in 1984.

Figure 5.3
Top University Industries - 1984 and 1988

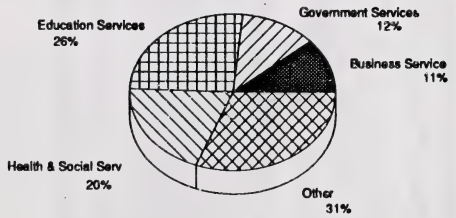
Graduate Degrees - 1984



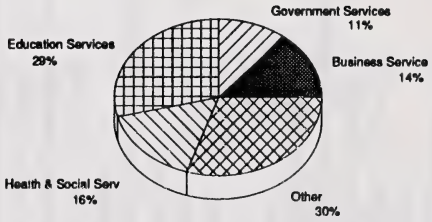
Graduate Degrees - 1988



Undergraduate Degrees - 1984



Undergraduate Degrees - 1988



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

Table 5.6
Industry (Standard Industrial Classification) of University Graduates
June, 1984 and May, 1988

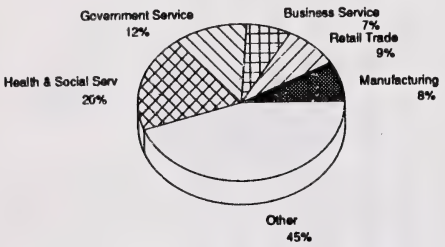
	Graduate Degrees (%)		Undergraduate Degrees (%)	
Industry	1984	1988	1984	1988
Agriculture & Related	0.2	--	--	--
Fishing & Trapping	--	--	--	--
Logging & Forestry	0.6	--	--	--
Mining & Oil Wells	7.2	5.0	6.2	5.0
Manufacturing	2.7	3.1*	3.2*	3.1*
Construction	0.8	--	--	1.4*
Transport. & Storage	0.9	--	--	1.2*
Communications & Utilities	1.3	--	2.6*	2.1
Wholesale Trade	1.4	--	2.4*	2.0
Retail Trade	0.5	--	3.6*	4.3
Finance & Insurance	1.5	--	3.0*	2.3
Real Estate & Ins.	0.2	--	--	1.4*
Business Service	8.9	10.7	11.4	13.5
Government Services	15.6	11.0	12.1	11.3
Education Services	47.0	49.7	25.9	28.8
Health & Social Serv.	9.3	11.4	19.9	16.2
Accom., Food & Bev	0.2	--	--	1.6*
Other Service	1.9	--	3.4*	3.3
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**746**	**1,146**	**5,354**	**6,553**

* Percentages may not be reliable due to small cell size
-- Data are not reliable enough to be released

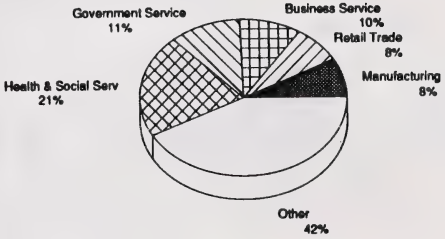
A different picture emerged with College/Technical and Trade/Vocational graduates. As shown in Table 5.7, graduates from both certification levels were more distributed across industries than were their university counterparts. As shown in Figure 5.4, at the College/Technical level, the top five industries in both 1988 and 1984 were: Health & Social Service, Government Service, Business Service, Manufacturing, and Retail Trade. In 1988, these industries accounted for 58 percent of College/Technical graduates. The top five industries at the Trade/Vocational level, accounting for 62 percent of graduates in 1988, were: Health & Social Service, Government Service, Retail Trade, Manufacturing, and Construction. These were also the top five industries in 1984 as shown in Figure 5.4.

Figure 5.4
Top Industries - 1984 and 1988

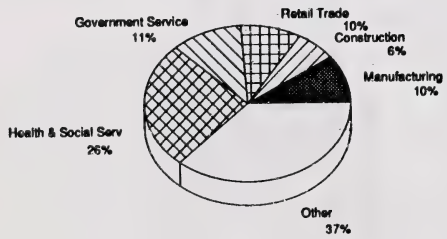
College/Technical - 1984



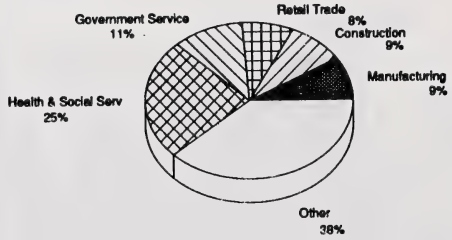
College/Technical - 1988



Trade/Vocational - 1984



Trade/Vocational - 1988



Source: Survey of 1986 Gradutes - Alberta Data
National Graduates Survey - Alberta Data

Table 5.7
Industry (Standard Industrial Classification) of
College/Technical and Trade/Vocational Graduates
June, 1984 and May, 1988

	College/Technical (%)		Trade/Vocational (%)	
Industry	1984	1988	1984	1988
Agriculture & Related	4.0	3.4	5.2*	--
Fishing & Trapping	--	--	--	--
Logging & Forestry	--	0.5*	--	--
Mining & Oil Wells	6.3	3.9	--	4.6
Manufacturing	8.3	7.9	10.0	9.2
Construction	3.6	4.0	6.4*	8.9
Transport. & Storage	2.4*	3.0	--	2.8*
Communications & Utilities	5.3	4.0	--	2.0*
Wholesale Trade	4.6	4.7	--	4.0
Retail Trade	8.7	7.8	9.5	7.7
Finance & Insurance	3.2*	2.7	--	2.2
Real Estate & Ins.	--	1.0*	--	--
Business Service	7.0	9.8	--	4.9
Government Service	11.5	11.4	11.2	11.4
Education Service	5.5	6.7	--	5.0
Health & Social Serv.	19.9	21.1	26.3	25.1
Accom., Food & Bev.	3.7	2.9	5.2*	4.0
Other Service	3.9	5.3	5.4*	4.6
Total Percentage*	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**5,121**	**7,115**	**855**	**1,758**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

5.3.1 Industries by Gender

As in the occupational data, industrial segregation increased at each successively lower level of certification. Table 5.8 below shows that at the Graduate Degree and Undergraduate Degree level, women and men shared two of their top three industries. The top industry for both women and men was Education Service; a second shared industry was Government Service. However, a third top industry for men was Business Service, while for women it was Health & Social Service.

At the College/Technical level, women and men shared only one of their top three industries - Business Service. As shown in Table 5.9, at the College/Technical level, the remaining top two industries were Manufacturing, and Government Service for men and Health & Social Service, and Education Service for women. At the Trade/Vocational level, women and men again shared one of their top three industries - Government Service. The remaining top two industries were Construction, and Manufacturing for men and Health & Social Services, and Other Service for women.

Table 5.8
May, 1988 Industries by Gender
University Graduates

Industry	Graduate Degrees (%)		Undergraduate Degrees (%)	
	Male	Female	Male	Female
Agriculture & Related	--	--	--	--
Fishing & Trapping	--	--	--	--
Logging & Forestry	--	--	--	--
Mining & Oil Wells	7.7	--	6.5	2.7*
Manufacturing	--	--	7.3	3.4
Construction	--	--	2.1*	--
Transport. & Storage	--	--	1.8*	--
Communications & Utilities	--	--	3.1*	--
Wholesale Trade	--	--	2.8*	1.3*
Retail Trade	--	--	4.2	4.3
Finance & Insurance	--	--	2.9*	1.8*
Real Estate & Ins.	--	--	1.8*	--
Business Service	14.7	6.5*	17.1	10.2
Government Service	13.8	8.1	11.7	10.9
Education Service	41.2	58.8	21.8	35.1
Health & Social Serv.	6.0*	17.1	9.6	22.0
Accom., Food & Bev.	--	--	1.9*	1.4*
Other Service	--	--	4.1	2.7*
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**589**	**557**	**3094**	**3359**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

Table 5.9
May, 1988 Industries by Gender
College/Technical and Trade/Vocational Graduates

	College/Technical (%)		Trade/Vocational (%)	
Industry	Male	Female	Male	Female
Agriculture & Related	4.7	2.4	--	--
Fishing & Trapping	--	--	--	--
Logging & Forestry	--	--	--	--
Mining & Oil Wells	5.7	2.7	7.1*	--
Manufacturing	10.6	5.2	14.7	4.6*
Construction	6.8	1.8*	17.7	--
Transport. & Storage	4.8	1.5*	--	--
Communications & Utilities	5.7	2.7	--	--
Wholesale Trade	7.2	2.4	6.5*	--
Retail Trade	9.3	6.3	10.1	5.7*
Finance & Insurance	1.4*	3.5	--	3.7*
Real Estate & Ins.	--	1.1*	--	--
Business Service	10.3	9.3	5.3*	4.6*
Government Service	14.5	9.2	10.9	11.8
Education Service	2.9	9.7	--	6.2*
Health & Social Serv.	6.1	34.1	7.7	39.3
Accom., Food & Bev.	3.7	2.1	--	4.4*
Other Service	4.4	5.8	--	6.4*
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**3081**	**3684**	**793**	**965**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

5.4 Full-time/Part-time Employment

Table 5.10 shows that, as in the 1984 reference period, approximately 90 percent of graduates who were employed in May, 1988 were working in full-time jobs. The percentage of graduates working full-time is relatively constant across certification levels with College/Technical graduates exhibiting the highest rate of full-time employment at 93 percent.

Table 5.10
Job Status - Full-Time/Part-Time
1984 and 1988

Full-Time/ Part-Time	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Full-Time	91.6	90.5	90.6	86.8
Part-time	8.4	9.5	9.4	13.2
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**749**	**5,276**	**5,129**	**845**
May, 1988				
Full-time	88.5	88.4	92.5	87.1
Part-time	11.5	11.6	7.5	12.9
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,081**	**6,373**	**6,910**	**1,785**

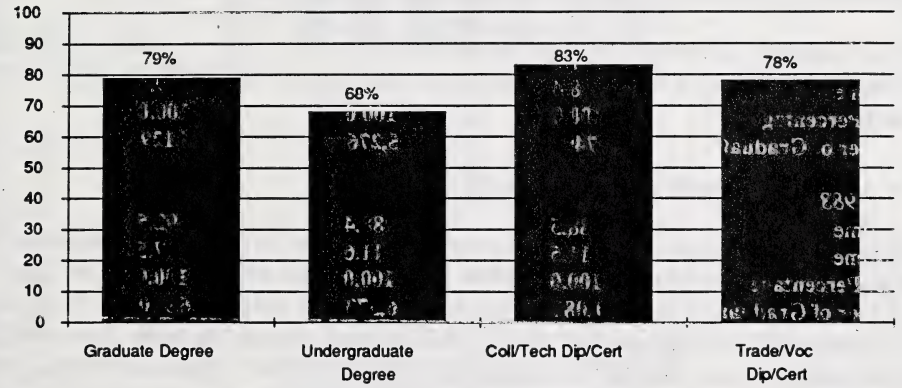
When employment status is examined by field of study, it is apparent that graduates from fields of study at all certification levels were quite successful at finding full-time employment; over 70 percent of graduates from all fields of study were working full time in May, 1988. However, variation across the fields of study still existed. At the Graduate Degree level, Fine & Applied Arts graduates were the least likely to be employed full-time (85 percent), while Engineering & Applied Science graduates were the most likely (94 percent) to be in full-time jobs. At the Undergraduate Degree level, 83 percent of Education and 95 percent of Health Science graduates were employed full-time. At the College/Technical level, Arts, Humanities graduates, at 84 percent, were the least likely to be working full-time, while Secretarial/Clerical graduates were the most likely to be working full-time (98 percent). Finally, at the Trade/Vocational level, Secretarial/Clerical graduates at 74 percent had the lowest rate of full-time employment (Secretarial/Clerical and Social Sciences/Services at 80 percent), while 96 percent of Health Services graduates were employed full time.

While field of study clearly affected employment status, gender did not. Males and females, at all levels of certification, were equally likely to be employed full-time.

5.5 Permanent/Temporary Employment

As indicated in Table 5.11 and Figure 5.5 below, graduates at all levels of certification were less successful at finding permanent employment than they were at finding full-time employment. Roughly 80 percent of Graduate Degree, College/Technical and Trade/Vocational graduates were employed in permanent jobs in May, 1988. Undergraduate Degree holders did not fare so well; roughly one-third of them had not found permanent employment by May, 1988.

Figure 5.5
Percentage of Graduates in Permanent Jobs
by Certification Level - 1988



Source: Survey of 1986 Graduates - Alberta Data

Table 5.11
Job Status - Permanent/Temporary
1984 and 1988

Permanent/ Temporary	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Permanent	82.6	72.6	84.8	83.4
Temporary	17.4	27.4	15.2	16.6
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**684**	**4,908**	**4,791**	**785**
May, 1988				
Permanent	78.8	67.9	83.0	77.7
Temporary	21.2	32.1	17.0	22.3
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,085**	**6,224**	**6,905**	**1,710**

An analysis of employment status by field of study reveals some marked differences in the proportions of graduates in permanent jobs. As indicated in Figure 5.6, at the Graduate Degree level, 67 percent of Fine & Applied Arts and Math & Physical Science graduates occupied permanent positions, while 89 percent of Education graduates fell into this category. At the Undergraduate Degree level, just slightly more than half (53 percent) of Agriculture & Biological Science graduates were employed in permanent jobs; at the other end of the spectrum, 89 percent of Math & Physical Sciences and Engineering & Applied Science graduates were in permanent jobs. Figure 5.7 shows that at the College/Technical level, graduates from Resource Technology were the least likely to be in permanent positions (71 percent), while graduates from Health Services were the most likely (90 percent). Health Services graduates were also the most likely to be in permanent positions at the Trade/Vocational level (88 percent). Arts, Humanities graduates, at 66 percent, were the least likely to be in permanent positions.

These striking differences are not observed when job status is examined by gender. Males and females, at all levels of certification, were equally likely to be in permanent positions.

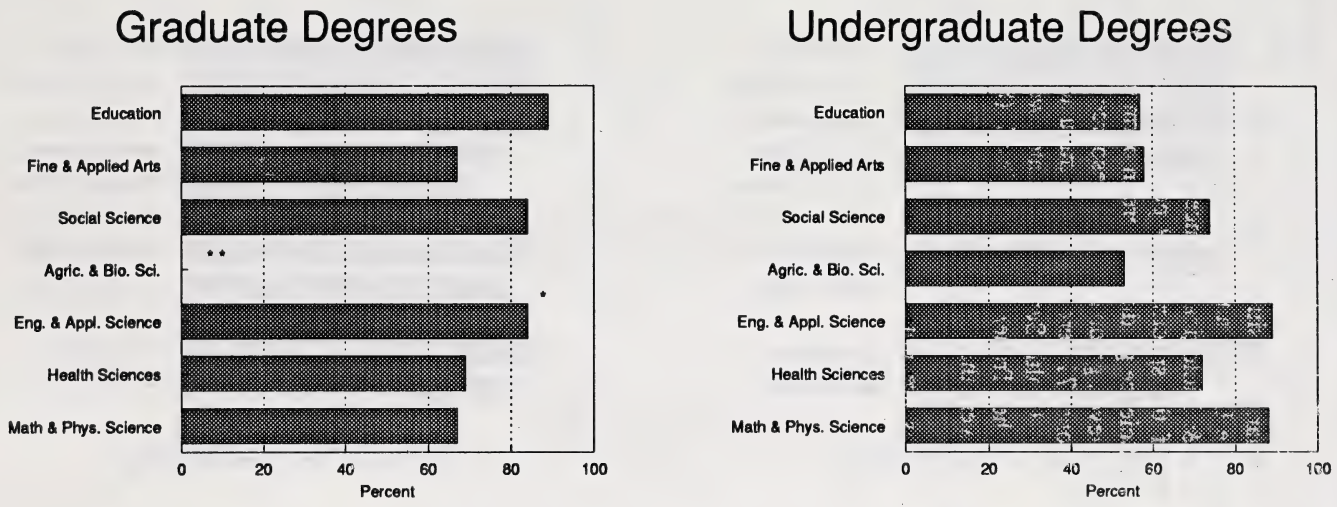
5.6 Length of Employment

As in the 1984 reference period, with respect to length of employment, graduates fell into two groups - those who had jobs before they graduated and those who did not. Table 5.12 below indicates that Graduate Degree holders had held their jobs of May, 1988 for an average of three and one-half years, while graduates from the other three certification levels had held their jobs for an average of a year and a half. Graduate Degree graduates had a clear advantage over graduates from other certification levels in that many did not have to compete in the labour market upon graduation.

Table 5.12
Months Working at June, 1984 and May, 1988 Jobs

Months Working At Job	Graduate Degrees	Undergraduate Degrees	College/ Technical	Trade/ Vocational
June, 1984				
Average	42.6	21.3	16.7	14.7
Median	23.5	19.4	16.4	13.2
Number of Graduates	**621**	**4,399**	**4,313**	**651**
May, 1988				
Average	39.7	19.1	18.1	18.0
Median	21.0	13.0	15.0	14.0
Number of Graduates	**1,101**	**6,130**	**6,930**	**1,748**

Figure 5.6
Percentage of University Graduates in Permanent Jobs
by Field of Study



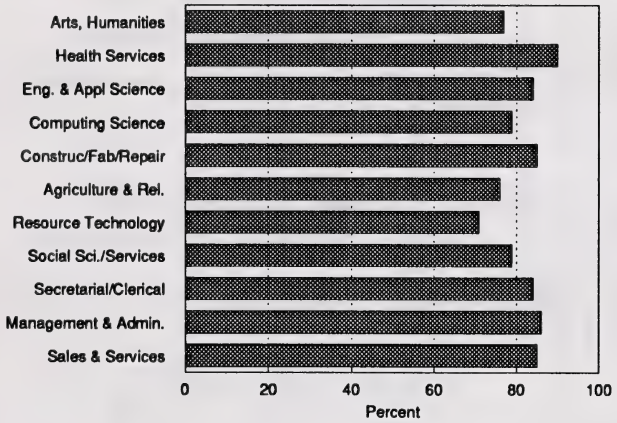
* Percentage may not be reliable due to small cell size

**Data are not reliable enough to be released

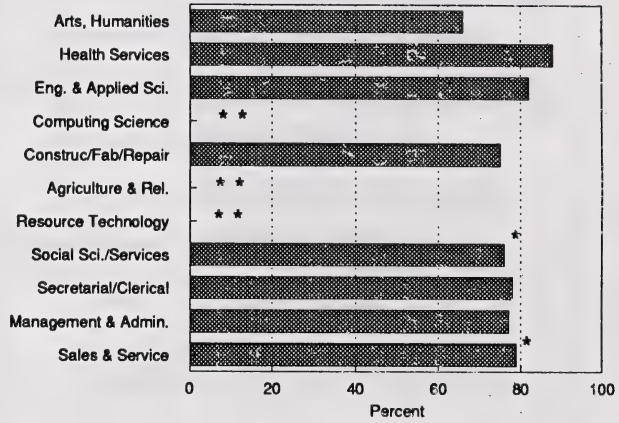
Source: Survey of 1986 Graduates - Alberta Data

Figure 5.7
Percentage of Graduates in Permanent Jobs by Field of Study

College/Technical



Trade/Vocational



* Percentage may not be reliable due to small cell size

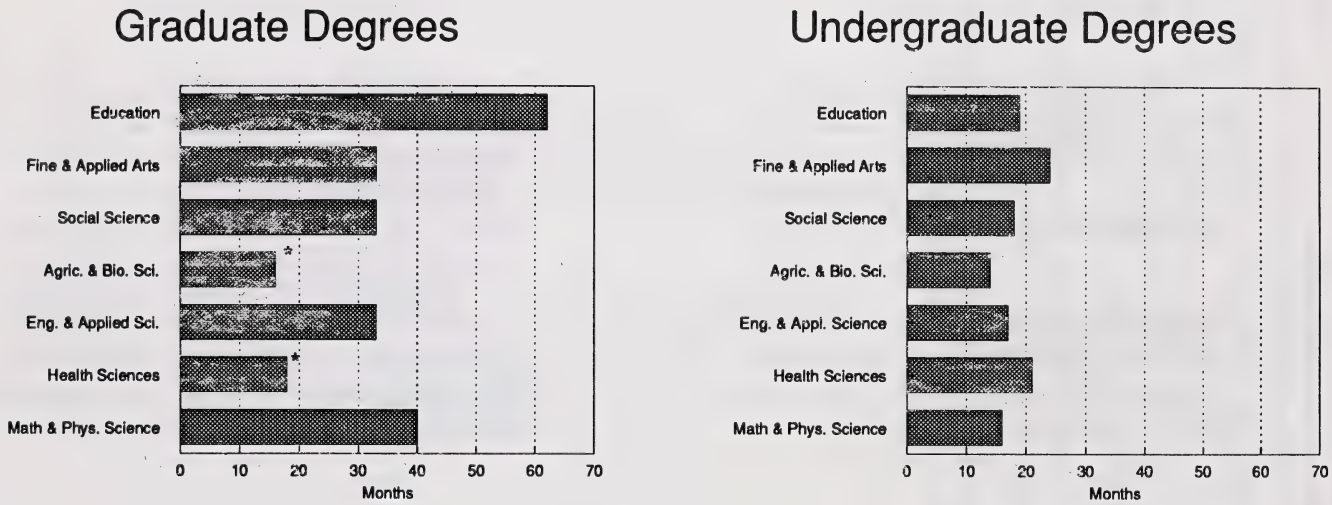
** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

As indicated in Figures 5.8 and 5.9, length of employment varied considerably across fields of study, especially at some certification levels. Differences were particularly large at the Graduate Degree level where Education graduates had held their May, 1988 jobs for over five years. In contrast, Agriculture and Biological Science graduates had held their jobs for only 16 months. The range was smaller at all other certification levels. Lengths of employment ranged from just over one year to roughly two years at all levels of certification. The fields of study at the high end of this range were Fine & Applied Arts, Social Sciences/Services and Health Services at the Undergraduate, College/Technical and Trade/Vocational levels respectively. The analogous fields of study at the lower end of the range were Agriculture and Biological Science, Construction/Fabrication/Repair and Arts, Humanities.

The gender of the graduate did not affect length of employment. On average, males and females, at all levels of certification, were employed at their May, 1988 jobs for the same length of time.

Figure 5.8
Length of Time at May 1988 Job - Universities by Field of Study

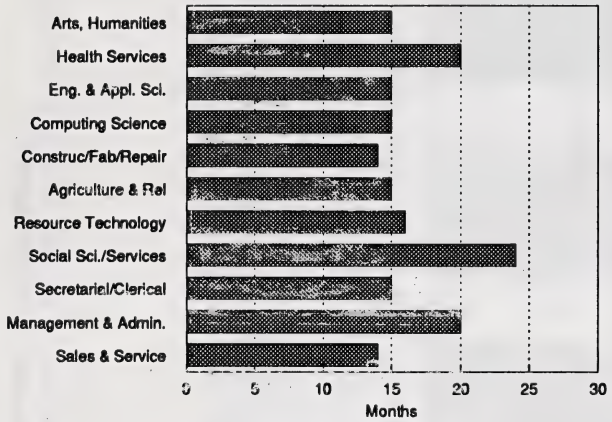


* Percentage may not be reliable due to small cell size

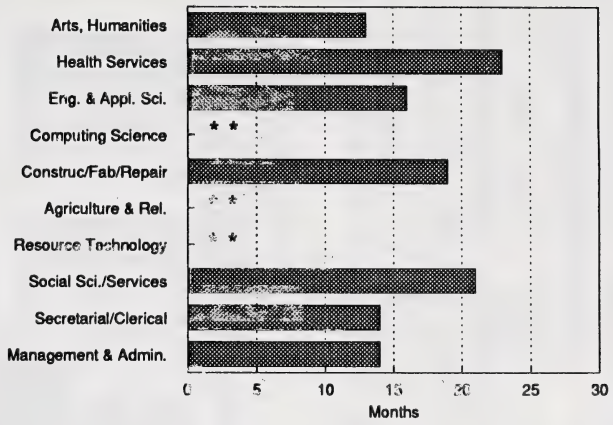
Source: Survey of 1986 Graduates - Alberta Data

Figure 5.9
Length of Time at May 1988 Job
by Field of Study

College/Technical



Trade/Vocational



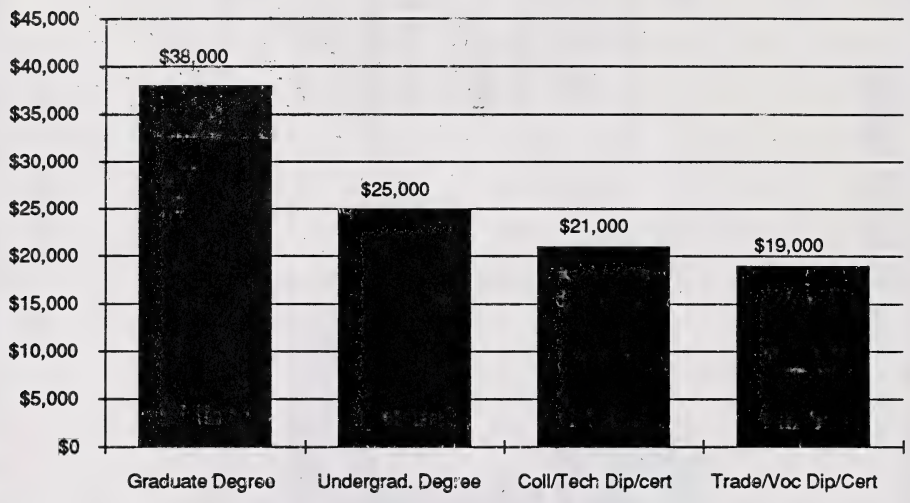
** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

5.7 Earnings

As indicated in Figure 5.10 below, there is a systematic rise of median earnings at each successively higher certification level.[8] The earnings of College/Technical and Trade/Vocational graduates employed in May, 1988 were similar at $21,000 and $19,000 respectively. Undergraduate Degree graduates earned considerably more than graduates from either of these levels at $25,000. The largest rise, however, appeared at the Graduate Degree level where graduates, with earnings of $38,000, earned over ten thousand dollars per year more than their Undergraduate Degree counterparts. This trend of increasing earnings with increasing certification level was also evident in the 1984 data.

Figure 5.10
Estimated Median Gross Annual Earnings of Graduates Employed Full-time
May, 1988



Source: Survey of 1986 Graduates - Alberta Data

Figure 5.11 provides a comparison of the earnings of 1988 and 1984 graduates in May 1988 constant dollars and reveals that, with the exception of Trade/Vocational graduates, graduates had slightly more earning power in 1984 than in 1988[9].

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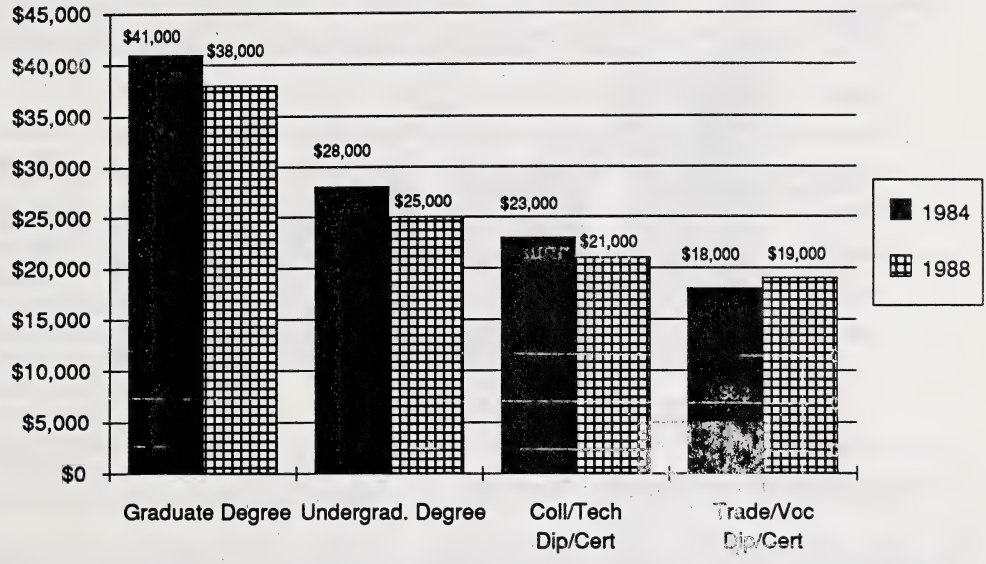
[8] The question asked was "If you were to work your usual hours at that job for 12 months, approximately what would be your gross earnings?"

[9] It should be borne in mind that constant dollars are crude measures derived from the Consumer Price Index. However, a comparison of earnings in constant dollars is more meaningful than that same comparison in actual dollars.

Figure 5.11
Estimated Median Gross Annual Earnings of Graduates Employed Full-time
in May 1988 Constant Dollars



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

5.7.1 Earnings by Gender

As indicated in Figure 5.12, in May, 1988, female graduates, at all levels of certification earned less than their male counterparts. Moreover, there was a tendency for the gap between women's and men's median gross annual earnings to widen as certification level increased. Beginning at the Graduate Degree level and ending at the Trade/Vocational level, the wage gaps were $3,000, $2,000, $5,000 and $7,000 respectively. Expressed in earnings ratios, women's earnings were 93 percent, 92 percent, 79 percent and 71 percent of men's. All of these ratios are considerably higher than the ratio for all Alberta women. Women in Alberta who worked full-year, full-time in 1988 earned 65 percent of what their male counterparts earned.[10]

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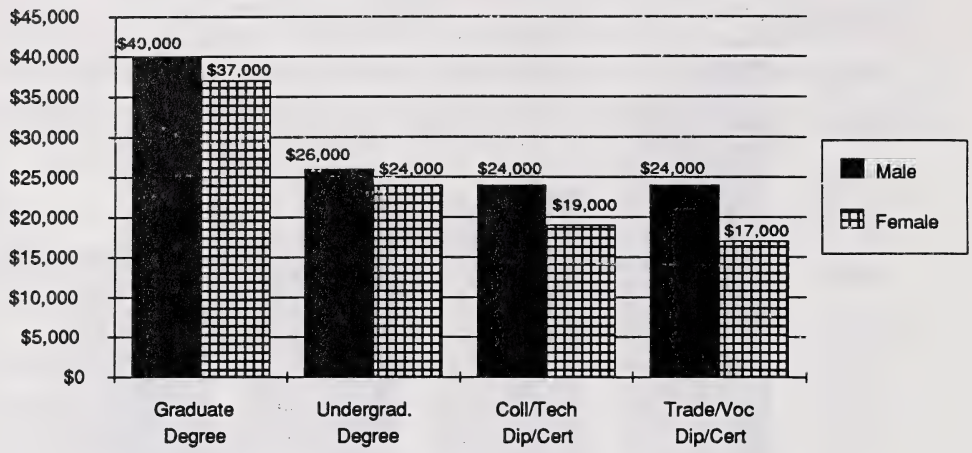
10 Statistics Canada 13-217, *Earnings of Men and Women*, 1989.

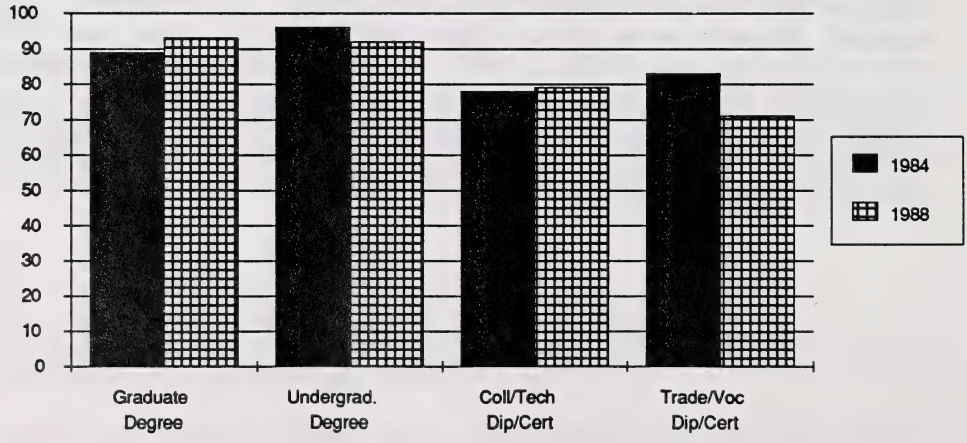
Figure 5.12
Estimated Median Gross Annual Earnings of Graduates Employed Full-Time
May, 1988 - by Gender



Source: Survey of 1986 Graduates - Alberta Data

As seen in Figure 5.13, earnings ratios (women's earnings as a percentage of men's) were not uniformly higher in 1988 than in 1984. At the Graduate Degree and College/Technical level, females' earnings ratios were higher in 1988 than in 1984, but this was not the case at the other two certification levels.

Figure 5.13
1984 and 1988 Earnings Ratios



Source: Survey of 1986 Graduates - Alberta Data
National Graduates Survey - Alberta Data

5.7.2 Earnings by Field of Study

Table 5.13 and Figure 5.14 indicate that at the Graduate Degree level, the fields of study with the most highly paid graduates were Education, Social Science, and Engineering & Applied Science with estimated median gross annual earnings of $40,000. These three fields of study accounted for the vast majority of graduates. The highest paid graduates at the Undergraduate Degree level were from Engineering & Applied Science ($31,000).

Table 5.13
Estimated Median Gross Annual Earnings of Graduates Employed Full-time
by Field of Study - Universities

Field of Study University	Graduate Degree ($)	Undergraduate Degree ($)
Education	40,000	25,000
Fine & Applied Arts	30,000	18,000
Social Science	40,000	23,000
Agriculture & Biological Science	--	23,000
Engineering & Applied Science	40,000	31,000
Health Sciences	34,000*	30,000
Math & Physical Sciences	36,000*	28,000

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

Table 5.14 and Figure 5.15 show that at the College/Technical level, the highest paid graduates were from Health Services at $28,000. Graduates from Resource Technology had the next highest median earnings at $25,000. However, each of these fields of study accounted for a small number of graduates at this certification level. At the Trade/Vocational level, graduates from Construction/Fabrication/Repair had by far the highest median income at $27,000. This field accounted for approximately one-quarter of graduates, the vast majority of them male. The lowest paid graduates came from two strongly female-dominated fields of study. Social Sciences/Services and Secretarial/Clerical graduates had gross median earnings of $15,000 and $17,000 respectively. Given these facts, it is not surprising that women's earnings are only 71 percent of men's at this certification level.

Table 5.14
Estimated Median Gross Annual Earnings of Graduates Employed Full-time
by Field of Study - College/Technical and Trade/Vocational Institutes

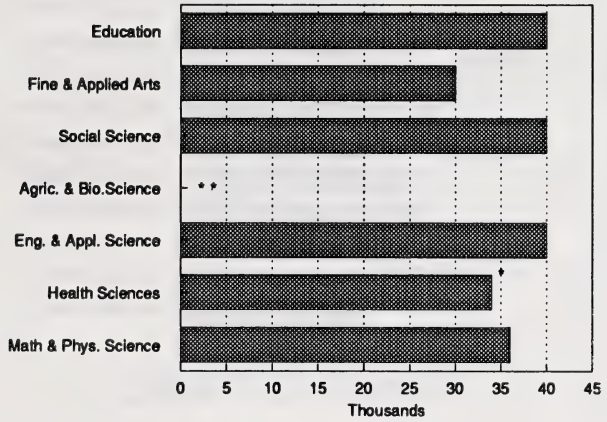
Field of Study College/Technical/Trade Vocational	College/ Technical ($)	Trade/ Vocational ($)
Arts, Humanities	18,000	18,000
Health Services	28,000	18,000
Engineers & Applied Science	23,000	22,000
Computing Science	24,000*	--
Construction/Fabric./Repair	22,000	27,000
Agriculture & Related	17,000	--
Resource Technology	25,000	--
Social Sciences/Services	19,000	15,000*
Secretarial/Clerical	17,000	17,000
Management & Administration	20,000	19,000
Sales & Service	20,000	--

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

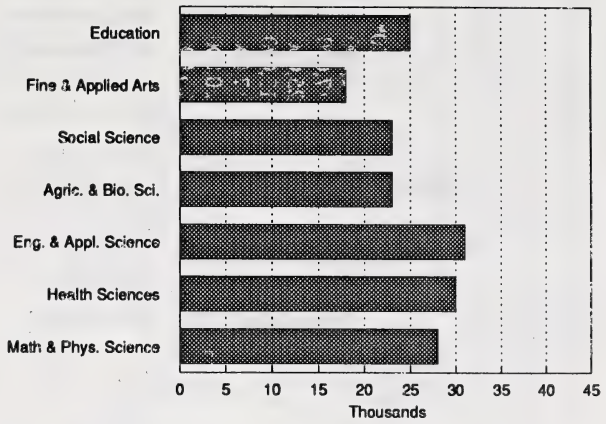
In summary, graduates' earnings were dependent on at least three factors: their certification level, their gender, and their field of study. First, Graduate Degree holders earned the most of all graduates, and graduates from each successively lower certification level earned less money. Second, males, at all levels of certification, earned more than females, and this trend was most pronounced at the College/Technical and Trade/Vocational levels. Finally, at all levels of certification, graduates' earnings varied considerably across fields of study.

Figure 5.14
Estimated Median Gross Annual 1988 Earnings of University Graduates Employed Full-Time by Field of Study

Graduate Degrees



Undergraduate Degrees



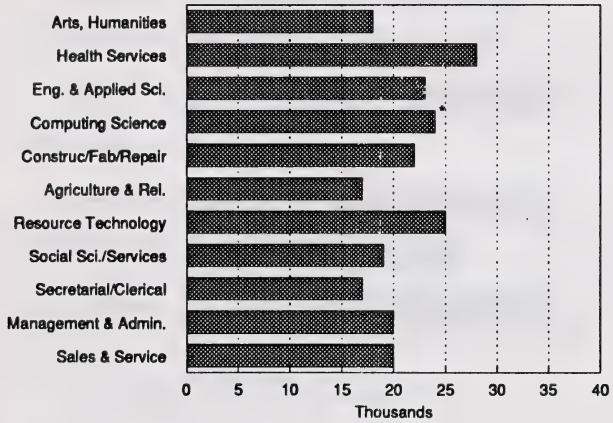
* Data may not be reliable due to small cell size

** Data are not reliable enough to be released

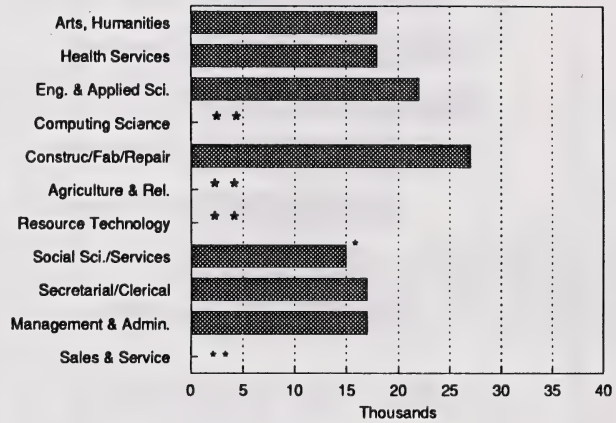
Source: Survey of 1986 Graduates - Alberta Data

Figure 5.15
Estimated Median Gross Annual 1988 Earnings of Graduates Employed Full-Time - by Field of Study

College/Technical



Trade/Vocational



* Percentages may not be reliable due to small cell size

** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

5.8 Satisfaction with May, 1988 Job Salary

Though earnings varied with certification level, satisfaction with those earnings was relatively constant across certification levels; approximately three-quarters of graduates at all four levels of certification reported being satisfied or very satisfied with the wages of their May, 1988 jobs (Table 5.15). Although this number clearly represents the majority of graduates, it is a smaller majority than were satisfied or very satisfied with the May, 1988 job itself, indicating that there are several factors influencing job satisfaction of which salary satisfaction is only one. Moreover, whereas 40 to 56 percent of graduates were very satisfied with their May, 1988 jobs, only approximately half that proportion were very satisfied with their May, 1988 salaries. These results parallel those from the 1984 survey.

Table 5.15
Salary Satisfaction
1984 and 1988

Satisfaction With Salary	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Very Satisfied	28.7	27.5	25.2	19.7
Satisfied	52.0	56.1	55.2	56.2
Not Very Satisfied	16.5	12.3	14.8	20.6
Not At All Satisfied	2.8	4.1*	4.8	3.6*
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**677**	**4,863**	**4,797**	**778**
May, 1988				
Very Satisfied	21.4	20.8	21.2	20.5
Satisfied	56.3	55.5	54.4	53.9
Not Very Satisfied	18.8	19.2	19.1	19.2
Not At All Satisfied	3.6	4.6	5.3	6.4
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,108**	**6,170**	**6,993**	**1,769**

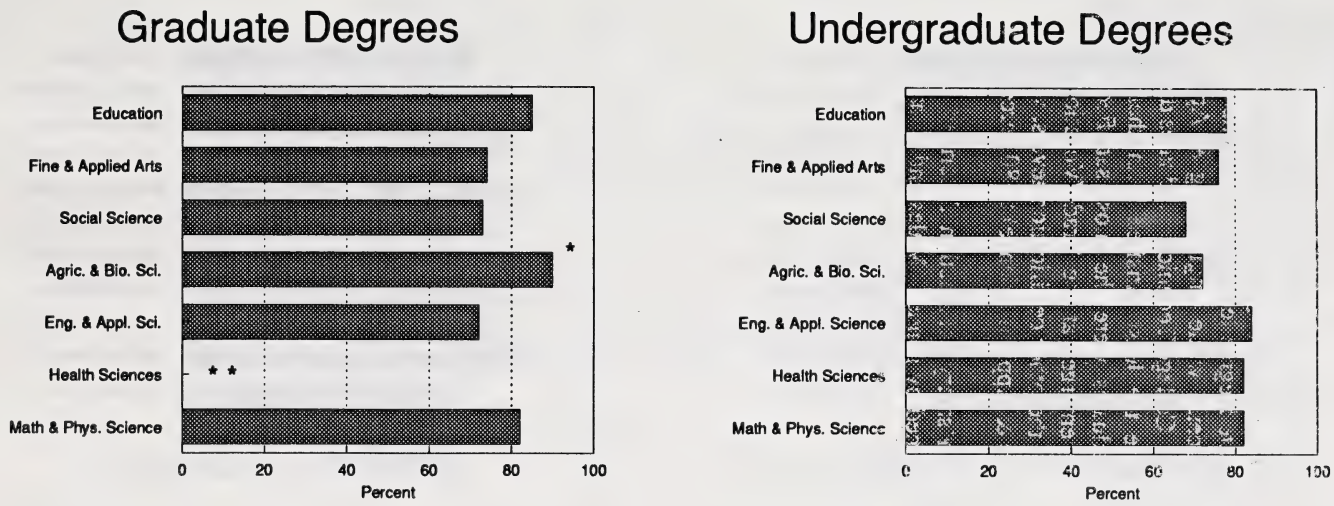
* Percentages may not be reliable due to small cell size

As displayed in Figures 5.16 and 5.17, when salary satisfaction is examined by field of study, some striking differences emerge, especially at the Trade/Vocational level. At the Graduate Degree level, proportions of satisfaction ranged from 72 percent (Engineering & Applied Science) to 90 percent[11] (Agriculture & Biological Science). The range was smaller at the Undergraduate Degree level; Social Science graduates were least satisfied with their salaries (68 percent) while Engineering & Applied Science graduates were most satisfied (84 percent). College/Technical graduates displayed a similar range. Arts, Humanities graduates were the least satisfied with their salaries (68 percent) while Resource Technology graduates were the most satisfied (84 percent). However, a radically different picture emerges at the Trade/Vocational level. Here the range is substantially larger than at the other certification levels, with satisfaction levels ranging from 56 percent (Engineers & Applied Science) to 80 percent (Health Services).

The marked differences in salary satisfaction described above are not observed when salary satisfaction is examined by gender. Males and females at all levels of certification were equally satisfied with their May, 1988 salaries.

[11] Percentage may not be reliable due to small cell size.

Figure 5.16
Percentage of University Graduates Satisfied With May 1988 Salary - by Field of Study



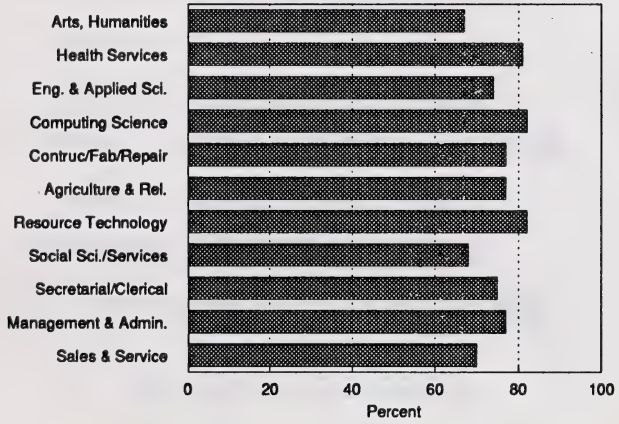
* Data may not be reliable due to small cell size

** Data are not reliable enough to be released

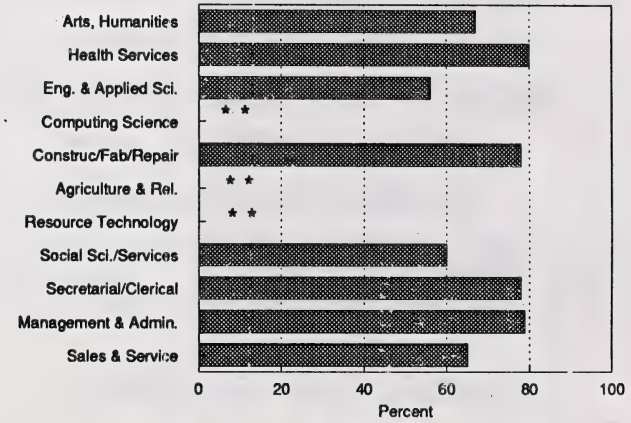
Source: Survey of 1986 Graduates - Alberta Data

Figure 5.17
Percentage of Graduates Satisfied with May 1988 Salary by Field of Study

College/Technical



Trade/Vocational



** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

5.9 Job Satisfaction

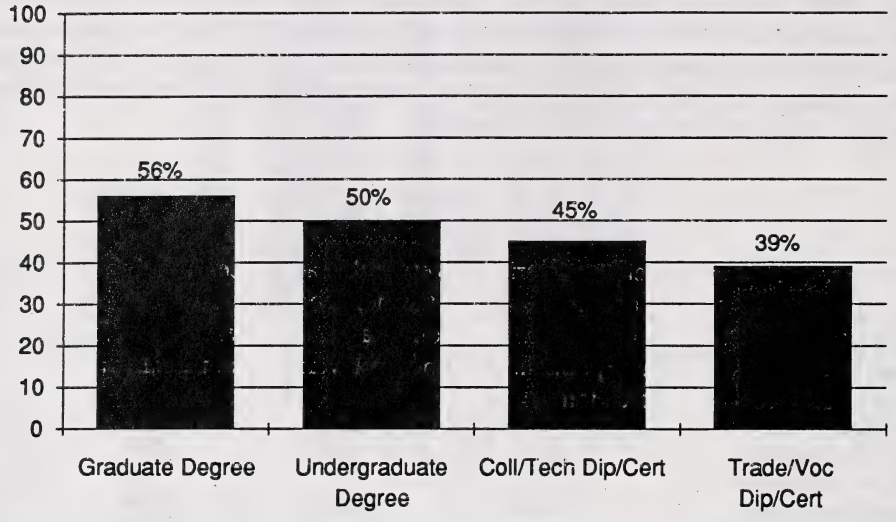
Table 5.16 indicates that, as with graduates from the 1984 survey, roughly nine out of ten graduates from all levels of certification were satisfied or very satisfied with their jobs of May, 1988. However, as indicated in Figure 5.18, the proportion of graduates who were very satisfied with their jobs decreased at each successively lower level of certification. Beginning with Graduate Degree graduates and ending with Trade/Vocational graduates, the percentage of graduates who were very satisfied with their jobs was as follows: 56 percent, 50 percent, 45 percent and 39 percent.

Table 5.16
Job Satisfaction
1984 and 1988

Satisfaction With Job	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Very Satisfied	57.7	49.3	44.5	38.9
Satisfied	33.5	42.3	42.4	43.3
Not Very Satisfied	7.1	6.5	10.4	15.1
Not At All Satisfied	--	--	2.8*	--
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**674**	**4,863**	**4,797**	**779**
May, 1988				
Very Satisfied	55.7	49.5	45.4	39.4
Satisfied	37.6	39.9	45.2	47.9
Not Very Satisfied	4.6	8.2	7.1	9.9
Not At All Satisfied	--	2.4	2.4	2.8*
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,114**	**6,182**	**7,003**	**1,766**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

Figure 5.18
Percentage of Graduates Very Satisfied with their Jobs
by Certification Level - 1988



Source: Survey of 1986 Graduates - Alberta Data

With the exception of the Trade/Vocational level, over 80 percent of graduates from all fields of study were satisfied with their May, 1988 jobs. However, even though there was a high level of job satisfaction, this level was not uniform across fields of study. At the Graduate Degree level, the percent of graduates satisfied with their May, 1988 jobs ranged from 86 percent for Health Sciences graduates to 100 percent[12] for Agriculture & Biological Science graduates. At the Undergraduate Degree level, a similar uniformity was displayed with satisfaction levels ranging from 84 percent (Fine & Applied Arts) to 94 percent (Health Sciences, Engineering & Applied Science). The range in at the College/Technical level was the smallest of all; the percentage satisfied with their jobs ranged from 87 percent (Management & Administration) to 94 percent (Health Services). Conversely, the range in satisfaction levels was largest at the Trade/Vocational level. At the lower end of the spectrum, 73 percent of Engineers & Applied Science graduates were satisfied with their jobs; at the upper end, several fields of study exhibited satisfaction levels of 90 percent.

An analysis of job satisfaction by gender reveals that gender was not a predictor of job satisfaction. That is, both males and females at all levels of certification were equally satisfied with their jobs.

12 Percentage may not be reliable due to small cell size.

5.10 Summary of Employed Graduates

For the most part, graduates shared similar labour-market experiences. The vast majority of graduates at all levels of certification were permanent, full-time employees who were satisfied with their jobs and salaries. However, some labour-market outcomes varied across certification levels. With respect to length of employment, for example, Graduate Degree holders had been, on average, employed for twice as long as all other graduates. Moreover, the occupations and industries entered patterned differently at various certification levels. At the university level, the most frequent occupations and industries were Teaching and Related and Education Service respectively, while at the College/Technical and Trade/Vocational level the analogous occupations and industries were Clerical and Related and Health and Social Services.

While many labour-market characteristics were stable across certification levels, this was not the case across fields of study. In fact, the fields of study that individuals graduated from had considerable impact on their labour-market experiences. Specifically, salary satisfaction and job status (permanent/temporary) varied dramatically across fields of study at all levels of certification.

However, while the field of study an individual graduated from determined labour-market outcomes, in general, his or her gender did not. With respect to the variables examined in the preceding section, graduates shared essentially the same experiences regardless of gender. The exceptions occurred in two areas: in the occupation and industry data where women and men were less likely to be employed in common occupations and industries at each successively lower level of certification; and in the earnings data, where males, at all levels of certification, earned more than females.

6.0 Characteristics of Graduates Unemployed in May, 1988

When reading this section, one should bear in mind that more than 80 percent of graduates at all levels of certification were employed. This is important in terms of explaining the many instances of qualified and unreleasable estimates that occur in some of the upcoming tables. These occur because the actual number of unemployed graduates is small so that when a certification level is subdivided for a given characteristic, the numbers become even smaller - making them unreleasable. For example, when unemployment rates are examined by field of study, we see that all of the Graduate Degree data is unreleasable (see Table 6.4). This is not a reflection on the quality of the data, but rather is attributable to the aforementioned reason.

As in the 1984 reference period, Graduate Degree and Trade/Vocational graduates had the lowest and highest unemployment rates respectively. Table 6.1 shows that the May, 1988 unemployment rates, starting at the Graduate Degree level and ending at the Trade/Vocational level were 8.3 percent, 12.9 percent, 9.6 percent and 19.6 percent respectively.

Table 6.1
Unemployment Rates by Certification Level
June, 1984 and May, 1988

All Graduates	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984	8.0	8.8	8.2	19.2
Number of Graduates	**65**	**509**	**461**	**201**
May, 1988	8.3	12.9	9.6	19.6
Number of Graduates	**101**	**924**	**743**	**427**

6.1 Age

As in the 1984 reference period, the relationship between age and unemployment rates differed at each certification level. Table 6.2 shows that in May, 1988 only two certification levels exhibited a trend toward decreasing unemployment with increased age. The clearest case is in the Trade/Vocational category where the unemployment rate gradually dropped from 21.5 to 11.7 percent as age increased. The Graduate Degree category exhibited this trend in a partial form; the 31-40 age group had a much lower unemployment rate than the 25-30 age group. However, the validity of this trend is questionable given that two of the estimates are qualified and two are unreleasable. This trend is not exhibited in the other two categories; College/Technical graduates had the lowest unemployment in the youngest age category, while Undergraduate Degree graduates had the lowest unemployment rate in the 25-30 age category.

Table 6.2
Unemployment Rates by Age Group
1984 and 1988

Age Group	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
24 years or less	0.0*	10.6	8.1	16.3
25 - 30 years	10.1	8.1	8.0	22.8
31 - 40 years	7.5	5.4	9.5	26.4
41+ years	6.0	12.5	8.7*	12.4
All Graduates	**8.0**	**8.8**	**8.2**	**19.2**
May, 1988				
24 years or less	--	14.5	8.3	21.5
25 - 30 years	13.5*	10.5	9.3	22.1
31 - 40 years	5.7*	16.5	13.4	19.7
41+ years	--	--	15.5*	11.7*
All Graduates	**8.3**	**12.9**	**9.6**	**19.6**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

6.2 Gender

With the exception of Graduate Degree graduates, females exhibited slightly to markedly lower unemployment rates than their male counterparts. As Table 6.3 indicates, the difference was most pronounced in the Trade/Vocational category, where the female unemployment rate was more than 8 percent lower than the analogous male rate. This trend differs from that of the 1984 reference period in which females at all levels of certification exhibited slightly lower unemployment rates.

Table 6.3
Unemployment Rates by Gender
1984 and 1988

Gender	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Male	9.2	8.9	9.3	22.4
Female	6.6	8.7	7.4	17.1
All Graduates	**8.0**	**8.8**	**8.2**	**19.2**
May, 1988				
Male	8.0	14.3	10.0	24.4
Female	8.6	11.7	8.5	15.5
All Graduates	**8.3**	**12.9**	**9.6**	**19.6**

6.3 Field of Study

As mentioned in Section 3.2.1, the field of study categories used in this report were derived from the five-digit USIS (University Student Information System) and CCSIS (Community College Student Information System) codes that represent all possible programs of study in the university and college systems. University graduates were divided into seven fields of study: Education, Fine and Applied Arts, Social Science, Agriculture and Biological Science, Engineering and Applied Science, Health Sciences, and Math and Physical Science. College/Technical Institute and Trade/Vocational graduates were divided into eleven fields of study: Arts, Humanities, Health Services, Engineering and Applied Science, Computing Science, Construction, Fabrication and Repair, Agriculture and Related, Resource Technology, Social Services, Secretarial/Clerical, Management/ Administration, and Sales and Service.

As can be seen in Tables 6.4 and 6.5 and Figure 6.1 below, with the exception of the Graduate Degree category, there were substantial differences in unemployment rates by field of study for each of the fields of study. Graduates whose field of study was in the Arts area (either Fine and Applied Arts or Arts, Humanities) had the highest unemployment rates at all levels of certification. However, the lowest unemployment rates varied according to certification level: at the Undergraduate Degree level, Education graduates had the lowest unemployment rate at 6 percent; the lowest rate at the College/Technical level was in the Health Services at 4 percent; at the Trade/Vocational level, the lowest rate of unemployment (18%) belonged to Construction, Fabrication and Repair graduates. However, comparisons within this level of certification should be interpreted with caution due to the high number of unreleasable estimates that occur in this category.

Although it is difficult to draw firm conclusions because of the large number of qualified and unreleasable estimates, the 1988 results in some respects parallel those of the previous survey. On the whole, the 1984 data show that, as in 1988, there was a trend for Arts graduates to have very high unemployment rates compared to those of most other fields of study. A similarity also occurs within the Undergraduate Degree level; as in 1988, Education graduates had the lowest unemployment rate.

Table 6.4
Unemployment Rates by Field of Study
Universities - 1984 and 1988

Field of Study	Graduate Degrees (%)		Undergraduate Degrees (%)	
Universities	1984	1988	1984	1988
Education	5.4	--	3.8	6.4*
Fine & Applied Arts	10.9	--	14.5	17.6
Social Science	5.8	--	11.1	15.9
Agriculture & Biological Science	15.9*	--	8.1*	--
Engineering & Applied Science	16.6	--	10.2	9.3*
Health Sciences	9.3*	--	5.2	13.2*
Math & Physical Sciences	8.5	--	8.2*	13.0*
All Graduates	**8.0**	**8.3**	**8.8**	**12.9**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

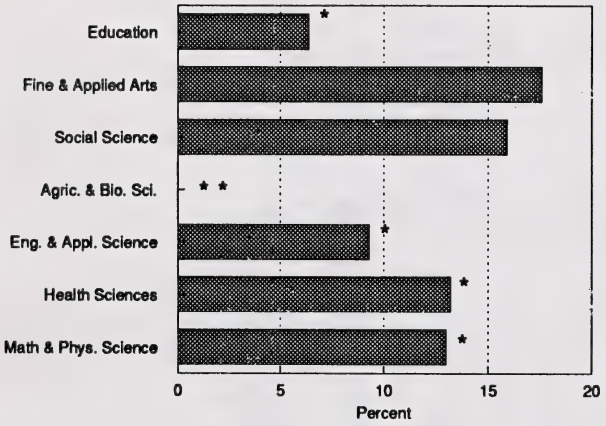
Table 6.5
Unemployment Rates by Field of Study
College/Technical and Trade/Vocational Institutes
1984 and 1988

Field of Study	College/ Technical (%)		Trade/ Vocational (%)	
College/Technical	1984	1988	1984	1988
Arts, Humanities	13.9	14.1	60.0*	46.8
Health Services	5.9	4.2*	2.5*	--
Engineering & Applied Science	12.6	10.2	15.9*	22.3*
Computer Science	4.0*	--	0.0*	--
Construction/Fabrication/Repair	13.9	11.5	28.7*	18.2
Agriculture & Related	15.7*	--	15.0*	--
Resource Technology	2.7	11.4*	33.3*	--
Social Services/Sciences	7.8	10.5	24.2*	--
Secretarial/Clerical	6.6	7.7*	28.8*	21.3
Management/Administration	1.6	10.8	12.5*	--
Sales & Service	6.4	--	16.7*	--
All Graduates	**8.2**	**9.6**	**19.2**	**19.6**

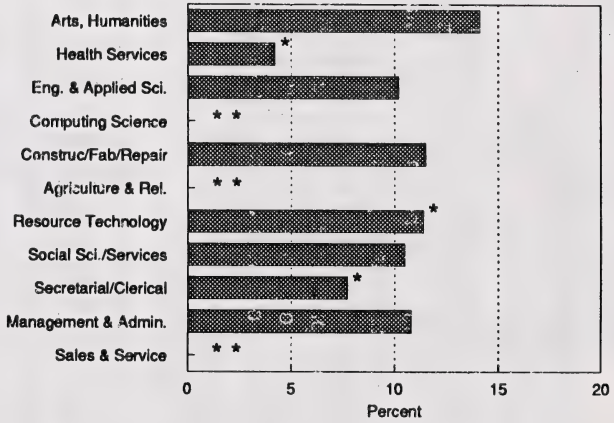
* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

Figure 6.1
Unemployment Rates by Field of Study - 1988

Undergraduate Degrees



College/Technical



* Percentage may not be reliable due to small cell size

** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

6.4 Full-Time Work Experience Prior to Program of Studies

Table 6.6 below shows that in certification levels from which data are releasable, the lowest unemployment rates belonged to graduates with one to five years of previous work experience, suggesting a relationship between previous full-time work experience and employment success. However, the relationship holds only to the five year level; after that point, increased years of previous work experience seem to hinder employment success. That is, there appear to be an optimum number of previous years work experience that aid a graduate in finding employment.

This trend for the most part parallels the trend in the 1984 data; the departure occurred in the Trade/Vocational category, where the lowest unemployment rate belonged to graduates who had less than one year of previous full-time work prior to their programs of study.

Table 6.6
Unemployment Rates by Years of Full-Time Work
Prior to Program of Studies
1984 and 1988

Yrs of Full-Time Work Prior to Program of Studies	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Less than 1 year	26.3*	12.6	9.9*	12.0*
1 year - 3 years	10.5	7.9	11.3	20.2
3 years - 5 years	6.8	3.6	5.4	21.0
5 years - 7 years	4.0	6.6	3.9	26.5
7+ years	5.6	8.4	9.5	19.1
All Graduates	**8.0**	**8.8**	**8.2**	**19.2**
May, 1988				
Less than 1 year	--	11.0	9.8*	22.1*
1 year - 3 years	--	10.2	9.9	25.3
3 years - 5 years	--	10.9*	7.2	16.0
5 years - 7 years	--	--	11.4	--
7+ years	--	15.9	10.9	18.4
All Graduates	**8.3**	**12.9**	**9.6**	**19.6**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

6.5 Unemployment Prior to May, 1988

As Table 6.7 indicates, graduates who were unemployed in January or October, 1987 were more likely than graduates who were employed during these periods to also be unemployed in May, 1988. This is precisely the trend that is exhibited in the 1984 data.

Moreover, the May, 1988 unemployment rates for graduates who were unemployed in October, 1987 are nearly double the May, 1988 unemployment rates for graduates who were unemployed in January, 1987, suggesting that the longer a graduate is unemployed, the more difficulty s/he will have obtaining employment. The same trend is present in the 1984 data, although the strength of it is not uniform across certification levels; only at the College/Technical and Trade/Vocational levels are June 1984 unemployment rates for those unemployed in October 1983 double the June 1984 unemployment rates for those unemployed in January, 1983.

Table 6.7
Unemployment Rates by Previous Unemployment
1984 and 1988

Previous Unemployment	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Unemployed January, 1983	24.2*	27.3	14.3	30.8
Unemployed October, 1983	26.3*	34.3	28.5	55.2
All Graduates	**8.0**	**8.8**	**8.2**	**19.2**
May, 1988				
Unemployed January, 1987	--	25.1	19.8	27.6
Unemployed October, 1987	--	45.4	35.0	42.0
All Graduates	**8.3**	**12.9**	**9.6**	**19.6**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

6.6 Summary of Unemployed Graduates

In summary, only certain of the characteristics examined in the preceding section were good predictors of unemployment. There was no identifiable relationship between age and unemployment. Males were somewhat more likely to be unemployed than females, and a certain amount of previous work experience aided graduates in finding employment. The clearest predictors of unemployment were previous unemployment and field of study; graduates unemployed in either of the previous reference periods were also much more likely than their employed counterparts to be unemployed in May, 1988; and arts graduates (Arts, Humanities or Fine and Applied Arts) had high unemployment rates at all certification levels.

7.0 Labour Force Activity Prior to May, 1988

7.1 Labour Force Activity between Graduation and Reference Week of Survey (May 1-7, 1988)

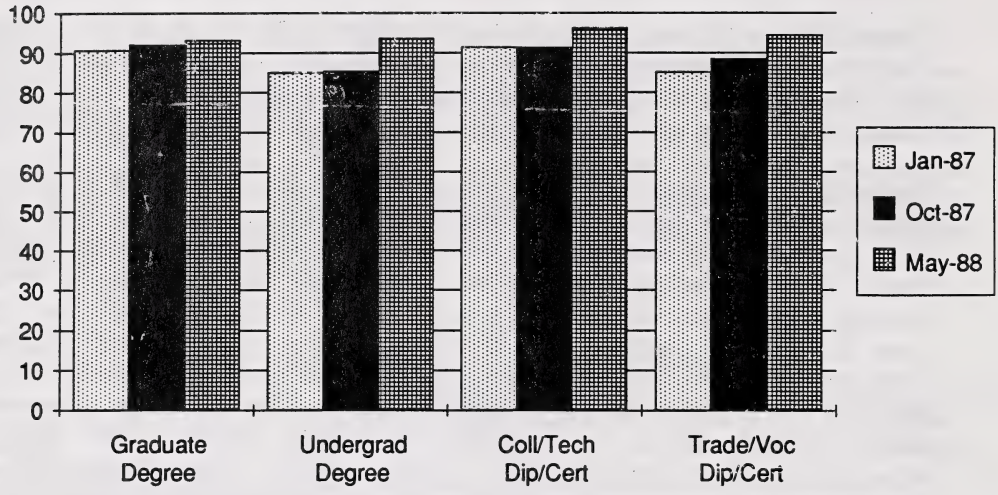
Labour force status was measured at three points in the Survey of 1986 Graduates. Graduates were asked about their labour force activities in: the last week of January, 1987 (6 - 9 months after graduation), the last week of October, 1987 (15 - 18 months after graduation) and the first week of May, 1988 (23 - 26 months after graduation).

As indicated in Table 7.1 and Figure 7.1, in the 1988 data, at all levels of certification, labour force participation increased at each reference period. That is, the more time that had elapsed since graduation in 1986, the more likely graduates were to be in the labour force. However, participation rates were not uniform across certification levels. In January, 1987 Graduate Degree and College/Technical graduates had higher participation rates (91 and 92 percent respectively) than their Undergraduate Degree and Trade/Vocational counterparts (85 percent). The same trend held in the October, 1987 reference period, except that Trade/Vocational participation rates began to approach the levels of Graduate Degree and College/Technical rates. By May, 1988, participation rates at all levels of certification were virtually uniform at approximately 95 percent. These results for the most part parallel those found in the 1984 data. Specifically, labour force participation tended to increase as time since graduation increased. Moreover, the participation rates approximately two years after graduation were roughly 95 percent at all levels of certification.

Table 7.1
Labour Force Participation Rates Over
Two Years Following Graduation
1983 - 1984 and 1987 - 1988

Reference Period	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
January, 1983				
(6-9 months after graduation)	88.8	83.0	89.0	93.5
October, 1983				
(15-18 months after graduation)	90.1	83.0	90.3	87.0
June, 1984				
(23-26 months after graduation)	94.3	92.0	95.9	93.5
January, 1987				
(6-9 months after graduation)	90.7	85.0	91.5	85.2
October, 1987				
(15-18 months after graduation)	92.1	85.5	91.5	88.6
May, 1988				
(23-26 months after graduation)	93.3	93.6	96.3	94.5

Figure 7.1
Labour Force Participation Rates Over
Two Years Following Graduation - January, 1987 - May, 1988



Source: Survey of 1986 Graduates - Alberta Data

Table 7.2 shows that, in the 1988 data, there was a general trend for unemployment rates to vary inversely with certification level. Of the four levels of certification, Graduate Degree holders had the lowest unemployment rates at all three reference periods ranging from 3.9 to 8.3 percent. The unemployment rates of Undergraduate Degree and College/Technical graduates were somewhat higher at all three reference periods ranging from 6.2 percent to 12.9 percent for the former and 7.1 percent to 10.0 percent for the latter. Finally, Trade/Vocational graduates clearly carried a disproportionate burden of unemployment, exhibiting unemployment rates ranging from 14.6 to 23.5 percent. Although this trend of higher unemployment rates at lower levels of certification was also exhibited in the 1984 data, the unemployment rates themselves tended to be higher at each analogous reference period. This is not surprising given the economic downturn that Alberta was experiencing at that time.

The 1988 data show that unemployment rates at all levels of certification followed an interesting pattern. Rates in the second reference period (October, 1987) were generally lower than those in the first reference period (January, 1987), but jumped again in the third reference period (May, 1988) when one would expect them to be down both because of economic conditions in Alberta and the fact that graduates were no longer recent entrants into the labour market.

This trend, though anomalous, is also exhibited in data from all other Canadian provinces. Table 7.3 below lists some unemployment rates from selected provinces for

the three above-mentioned reference periods. These rates characterize the group of University and College/Technical graduates.

Table 7.2
Unemployment Rates Over Two Years Following Graduation
1983 - 1984 and 1987 - 1988

Reference Period	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
January, 1983 (6-9 months after graduation)	5.4	8.3	11.0	27.3
October, 1983 (15-18 months after graduation)	5.5	5.7	7.8	18.6
June, 1984 (23-26 months after graduation)	8.0	8.8	8.2	19.2
January, 1987 (6-9 months after graduation)	3.9	6.2	10.0	23.5
October, 1987 (15-18 months after graduation)	3.4*	6.9	7.1	14.6
May, 1988 (23-26 months after graduation)	8.3	12.9	9.6	19.6

* Percentage may not be reliable due to small cell size

Table 7.3
Unemployment Rates Over Two Years Following Graduation
Selected Provinces 1987 - 1988

Province	January, 1987	October, 1987	May, 1988
Quebec	7.1	6.5	14.4
Ontario	5.3	3.5	5.8
Manitoba	6.0	5.0	9.5
Saskatchewan	7.2	5.5	10.2
British Columbia	7.7	5.3	8.9

The unemployment rates in Table 7.2, however, include **all** graduates in the labour force, even those who enrolled in further studies leading to degrees, diplomas, certificates or licences after graduation in 1986. As indicated in Table 7.4, when the group of graduates who took no further studies is examined, the situation improves somewhat. Unemployment rates still rise in the third reference period, but not nearly as much. The May, 1988 unemployment rates, beginning at the Graduate Degree level and ending at the Trade/Vocational level are as follows: 6.0 percent, 8.6 percent, 9.0 percent and 17.0 percent. The corresponding rates for **all** graduates are: 8.3 percent, 12.9 percent, 9.6 percent and 19.6 percent.

Table 7.4
Unemployment Rates Over
Two Years Following Graduation
Graduates Who Took No Further Education - 1987 - 1988

Reference Period	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
January, 1987 (6-9 months after graduation)	3.7*	7.3	10.7	25.2
October, 1987 (15-18 months after graduation)	--	8.3	7.4	13.9
May, 1988 (23-26 months after graduation)	6.0	8.6	9.0	17.0

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

Given that this group of Alberta graduates had roughly two years in which to integrate into the labour market, their high rates of unemployment are somewhat unexpected. Only Graduate Degree holders had an unemployment rate that was lower than the unemployment rate for Albertans of a similar age group. The seasonally unadjusted unemployment rate for the 25 - 34 age group in May, 1988 was 7.1 percent.[13] Undergraduate Degree and College/Technical graduates were not much above this rate, but the unemployment rate of Trade/Vocational graduates, at more than twice this figure, was still distressingly high.

13 Statistics Canada 71-001, *The Labour Force*, May, 1988.

8.0 Jobs, Education and Job Relatedness

8.1 Match Between May, 1988 Job Requirements and Attained Education

Table 8.1 below shows that many graduates were overqualified for their jobs of May, 1988. Roughly two-thirds of Graduate Degree holders and one-half of College/Technical and Trade/Vocational graduates fell into this category. Undergraduate Degree holders achieved a better education-occupation match; just over one-third of them were overqualified for their jobs of May, 1988, while over one-half were in jobs that matched their level of educational attainment. This is essentially the same pattern exhibited in the 1984 data.

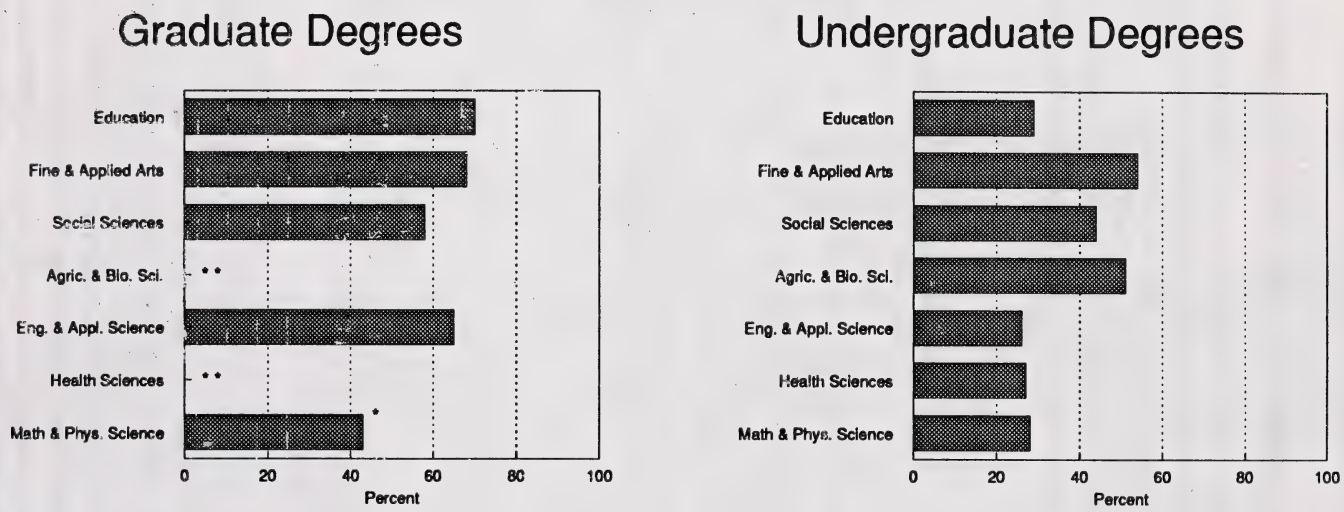
Table 8.1
Education Attained vs Education Required
by Certification Level
1984 and 1988

Education/Job Match	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Has More Education	58.4	29.7	41.9	56.3
Has Same Education	33.9	52.4	51.9	37.8
Has Less Education	--	2.6*	2.0*	3.7
Not Determinable	6.7	15.3	4.2	5.3
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**690**	**4,941**	**4,837**	**793**
May, 1988				
Has More Education	61.6	37.9	51.4	50.6
Has Same Education	33.1	55.9	42.4	34.9
Has Less Education	--	1.5*	0.5*	4.0
Not Determinable	3.2	4.8	5.8	10.4
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,094**	**6,268**	**6,977**	**1,745**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

An analysis of the match between educational qualifications and job requirements by field of study revealed some clear differences among various fields of study, especially at some levels of certification. As indicated in Figure 8.1, at the Graduate Degree level, with the exception of Math & Physical Science graduates, the majority of graduates from all fields of study were overqualified for their jobs of May, 1988. Specifically, 43 percent of Math & Physical graduates were overqualified for the jobs, while 70 percent of Education graduates were overqualified for their jobs. At the Undergraduate Degree level, the differences among fields of study were more pronounced. Fine & Applied Arts graduates had the highest proportion of graduates who were overqualified for their jobs (54 percent), while Engineering & Applied Science graduates had the lowest proportion of graduates who were overqualified for their jobs (26 percent).

Figure 8.1
Percentage of University Graduates Overqualified for their May 1988 Jobs - by Field of Study



* Data may not be reliable due to small cell size

** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

Figure 8.2 shows that the differences among fields of study were even more striking at the College/Technical level. Here, 72 percent of Sales & Service graduates were overqualified for their jobs, while only 23 percent of Health Services graduates were overqualified for their jobs. Health Services also had the lowest proportion of graduates who were overqualified for their jobs at the Trade/Vocational level (30 percent); conversely, Management & Administration had the highest proportion of graduates who were overqualified for their jobs at 61 percent.

An analysis by gender revealed that male and female university graduates were equally overqualified for their jobs of May, 1988, while at the College/Technical and Trade/Vocational levels, slightly more males were overqualified for their jobs than were females.

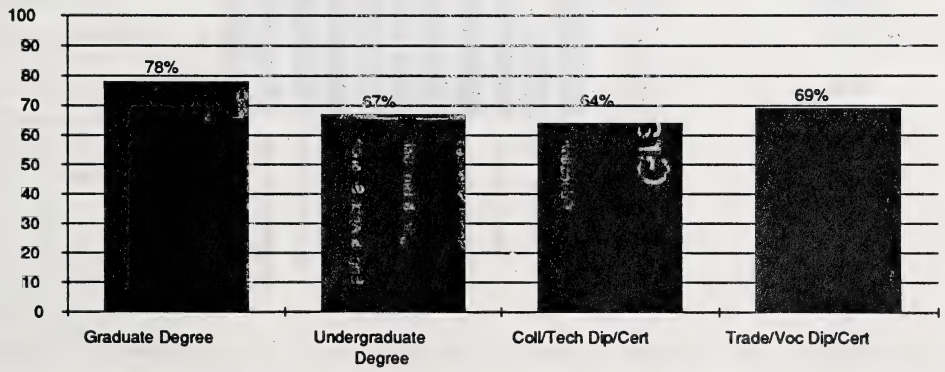
8.2 Perceptions of Program of Studies

8.2.1 Satisfaction with Program of Studies

As indicated in Table 8.2 and Figure 8.3, of all graduates, Graduate Degree holders appeared most satisfied with their programs of studies; in retrospect, roughly 80 percent of them would have selected the same program. In contrast, of graduates from the other three certification levels, roughly two-thirds indicated that they would have taken the same program. College/Technical graduates were the least likely to have chosen the same program; of those who would have chosen a different program, fifty-two percent of them indicated that they would have chosen a University program instead. This is essentially the same pattern exhibited in the 1984 data.

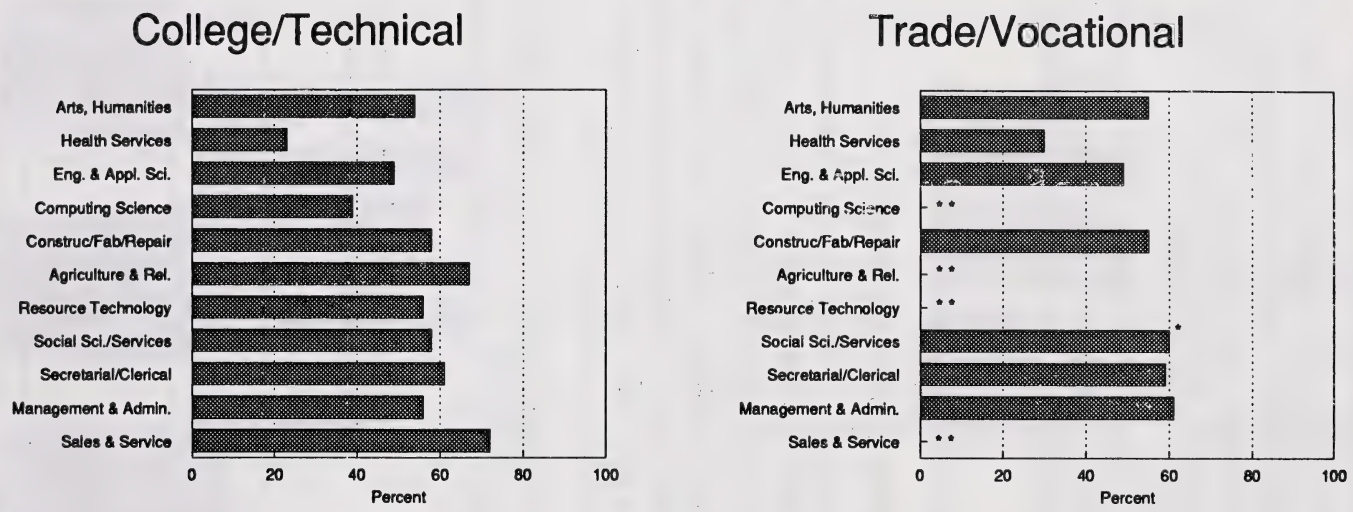
Not surprisingly, these results did not hold for unemployed graduates. However, the majority of graduates (64 percent, 59 percent, 56 percent, and 67 percent) still indicated that given another chance, they would have taken the same programs of studies.

Figure 8.3
Percentage of Graduates Who Would Have
Taken the Same Program - 1988



Source: Survey of 1986 Graduates - Alberta Data

Figure 8.2
Percentage of Graduates Overqualified for their May 1988 Jobs - by Field of Study



* Data may not be reliable due to small cell size

** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

Table 8.2
Education Program Selected if Given a Choice
Two Years After Graduation
1984 and 1988

Education Program Selected if Given A Choice	Graduate Degrees (%)	Undergrad Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Same Program	80.8	72.5	66.0	61.8
Different Program	17.7	26.3	32.6	35.4
No Program	1.5	1.2	1.4	2.8
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**859**	**6,273**	**5,824**	**1,127**
May, 1988				
Same Program	78.3	67.0	64.0	68.9
Different Program	19.5	30.2	33.1	26.0
No Program	--	1.1*	1.7	3.0
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,301**	**7,616**	**8,044**	**2,313**

* Percentage may not be reliable due to small cell size
-- Data are not reliable enough to be released

8.2.2 Career Relatedness of Program of Studies

Table 8.3 below shows that University graduates were more likely than their College/Technical counterparts to have taken programs of study that were not career specific. Over one-third of Graduate and Undergraduate Degree holders indicated that their programs had not been career specific; less than half that proportion of College/Technical graduates indicated likewise. Again, these results are synonymous with those from the 1984 survey.

Table 8.3
Career Specificity of Program of Studies
1984 and 1988

Career Specificity of Program of Studies	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)
June, 1984			
Career Specific	67.6	65.5	85.9
Non-Career Specific	32.4	34.5	14.1
Total Percentage	**100.0**	**100.0**	**100.0**
Number of Graduates	**695**	**5,016**	**4,892**
May, 1988			
Career Specific	63.2	61.3	84.4
Non-Career Specific	36.8	38.7	15.6
Total Percentage	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,150**	**6,553**	**7,032**

8.3 Perceptions of Job Relatedness

8.3.1 Relatedness of May, 1988 Job to Program of Studies

Graduates from the College/Technical and Trade/Vocational levels were considerably more likely than their university counterparts to be in jobs that were directly related to their programs of study (Table 8.4). However, as indicated in Table 8.4 and Figure 8.4, a large majority of graduates at all levels of certification held jobs that were related[14] to their programs of studies. Graduate Degree and College/Technical graduates were most likely to be in jobs that were directly or partly related to their programs of study; over eighty-five percent of them fell into these categories. Eighty-one percent of Undergraduate Degree holders were in jobs directly or partly related to their programs of study. Trade/Vocational graduates were the least likely to be in jobs that were directly or partly related to their programs of study; 79 percent of them fell into these categories.

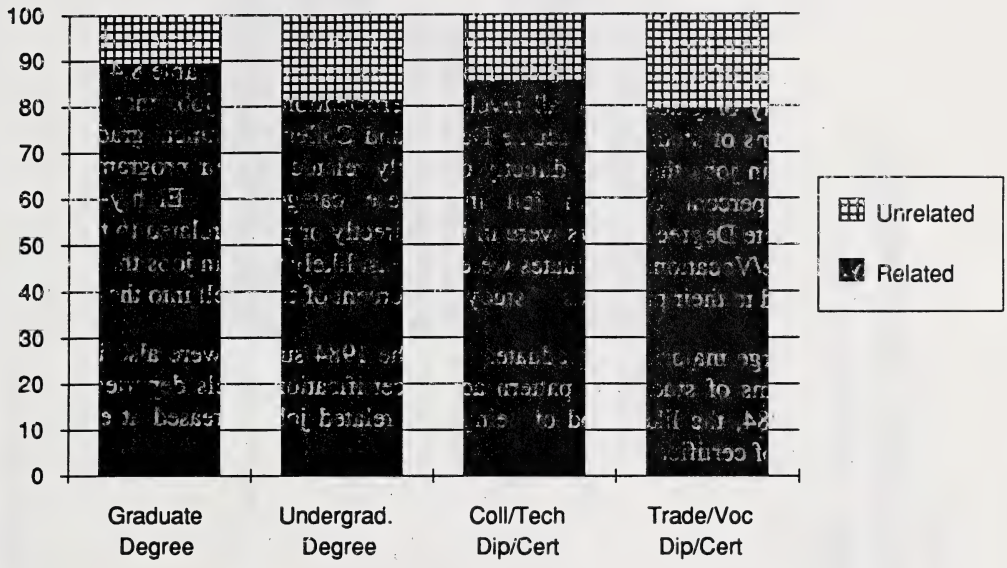
Though a large majority of graduates from the 1984 survey were also in jobs related to their programs of study, the pattern across certification levels departed from the 1988 data. In 1984, the likelihood of being in a related job decreased at each successively lower level of certification.

Table 8.4
Relatedness of Job to Program of Studies
1984 and 1988

Relatedness of Job to Program of Studies	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)	Trade/ Vocational (%)
June, 1984				
Directly Related	54.1	52.1	58.6	58.1
Partly Related	38.4	31.9	20.2	15.5
Unrelated	7.5	15.9	21.2	26.4
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**682**	**4,857**	**4,798**	**793**
May, 1988				
Directly Related	49.0	47.5	61.8	63.8
Partly Related	40.3	33.7	23.6	15.4
Unrelated	10.7	18.8	14.6	20.8
Total Percentage	**100.0**	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,136**	**6,501**	**7,005**	**1,815**

[14] The term related includes the categories of directly and partly related.

Figure 8.4
Relatedness of May 1988 Job to Program of Studies



Source: Survey of 1986 Graduates - Alberta Data

Although the majority of graduates at all levels of certification held jobs that were directly or partly related to their programs of study, Figures 8.5 and 8.6 show that the field of study that an individual graduated from had considerable impact on whether s/he was in a related job, especially at some levels of certification. At the Graduate Degree level, the proportions of graduates in related jobs was relatively uniform across fields of study; Fine & Applied Arts graduates were least likely to be in jobs related to their programs of study (84 percent), while Agriculture & Biological Sciences graduates were most likely to be in related jobs (94 percent[15]). The differences are more striking at the Undergraduate Degree level. At this level, only 62 percent of Fine & Applied Arts graduates were in related jobs, while the vast majority of Health Sciences and Engineering & Applied Sciences graduates (92 percent) were in related jobs.

At the College/Technical level, Health Services graduates were the most likely to be in jobs related to their programs of study; 98 percent of them fell into this category. Resource Technology graduates, at 70 percent, were least likely to be in jobs related to their programs of study. At the Trade/Vocational level, Health Services graduates were again the most likely to be in jobs related to their programs of study at 96 percent; Arts, Humanities graduates, at 54 percent, were least likely to be in jobs related to their programs of study.

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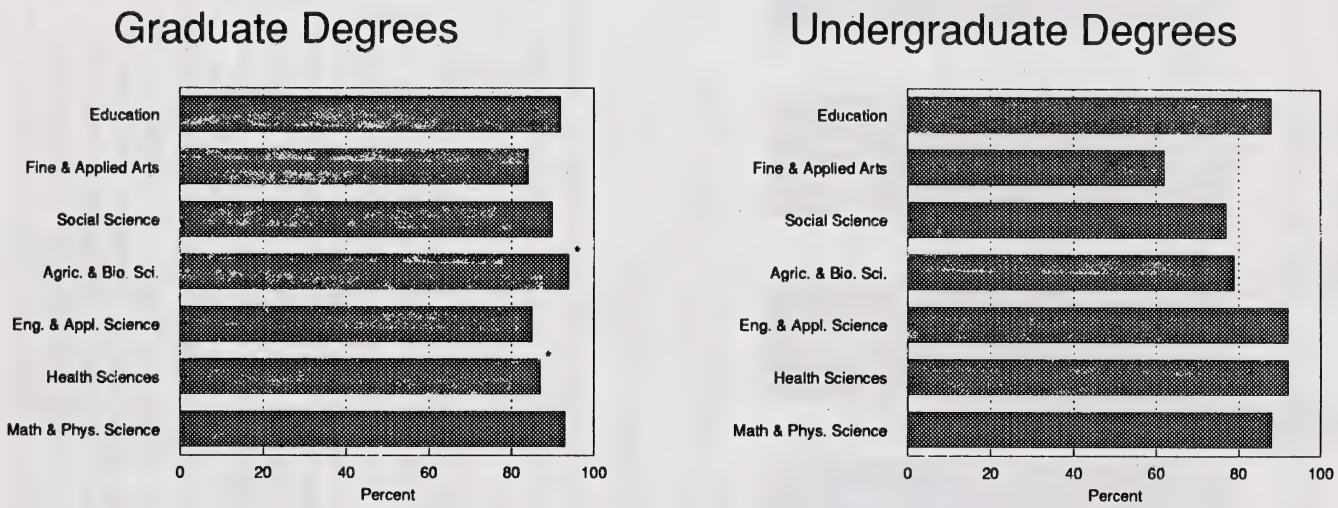
15 Percentage may not be reliable due to small cell size.

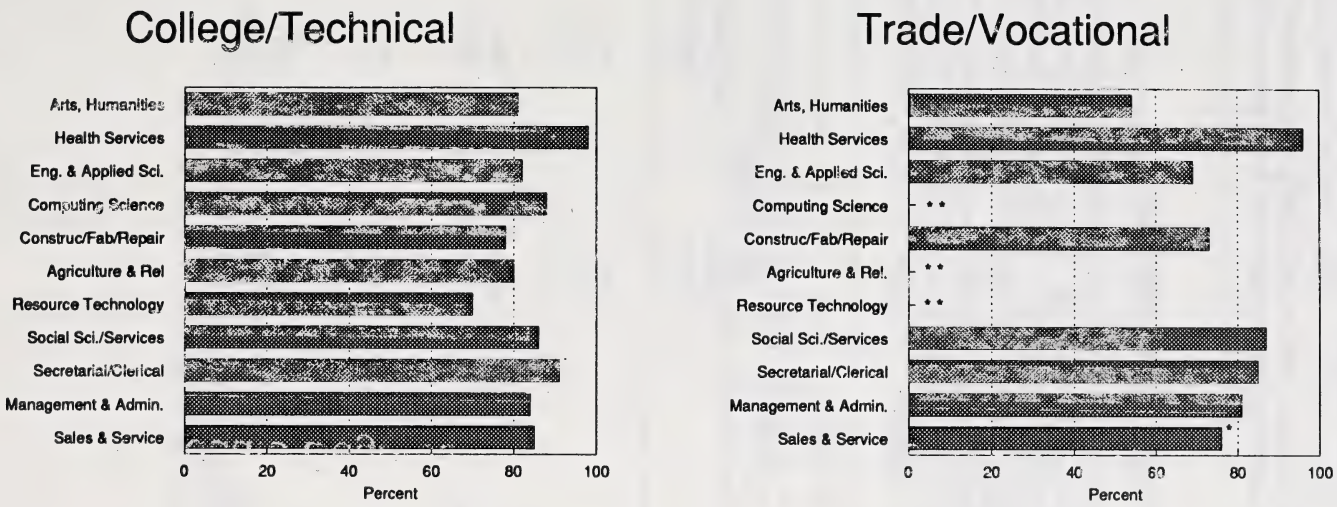
Figure 8.5
Percentage of University Graduates in Jobs Related to their Programs of Study - by Field of Study



* Data may not be reliable due to small cell size

Source: Survey of 1986 Graduates - Alberta Data

Figure 8.6
Percentage of Graduates in Jobs Related to their Programs of Study - by Field of Study



* Data may not be reliable due to small cell size.
** Data are not reliable enough to be released

Source: Survey of 1986 Graduates - Alberta Data

The likelihood of a graduate being in a related job was to a certain degree affected by gender. At the university level, (i.e. both Graduate Degree and Undergraduate Degree holders) males and females were equally likely to be in related jobs, while at the College/Technical and Trade/Vocational levels, females were more likely than males to be in related jobs.

8.3.2 Importance of Job Relatedness

Table 8.5 shows that, as in 1984, the vast majority of graduates (over 80 percent) felt that it was important or very important that their jobs be related to their programs of study, although among the certification levels, Undergraduate Degree graduates were somewhat less likely to hold this opinion. Moreover, when the above categories are examined separately, Undergraduate Degree holders were least likely to feel that job relatedness was very important. While half of Graduate Degree and College/Technical graduates felt that this was very important, 40 percent of Undergraduate Degree holders held this belief.

Table 8.5
Importance of Job Relatedness to Program of Studies
1984 and 1988

Importance of Job Relatedness to Program of Studies	Graduate Degrees (%)	Undergraduate Degrees (%)	College/ Technical (%)
June, 1984			
Very Important	54.8	50.9	58.7
Important	34.7	35.9	33.3
Not Very Important	8.8	11.2	6.3
Not At All Important	--	--	--
Total Percentage	**100.0**	**100.0**	**100.0**
Number of Graduates	**861**	**6,265**	**5,824**
May, 1988			
Very Important	48.7	40.6	49.8
Important	39.0	42.9	37.7
Not Very Important	8.0	11.1	7.4
Not At All Important	3.3*	4.3	4.2
Total Percentage	**100.0**	**100.0**	**100.0**
Number of Graduates	**1,303**	**7,630**	**7,856**

* Data may not be reliable due to small cell size
-- Data are not reliable enough to be released

8.4 Summary of Education and Job Requirements

Overall, though the vast majority of graduates at all levels of certification had found education-related work, many were overqualified for their jobs. In fact, nearly two-thirds of Graduate Degree holders had more education than was required for their May, 1988 jobs.

Not surprisingly, the fields of study individuals graduated from had considerable impact on whether they could use their acquired skills in the labour market. For example, at the Undergraduate Degree level, Fine & Applied Arts graduates were the most likely to be working in unrelated jobs for which they were overqualified. Conversely, Engineering & Applied Sciences graduates had the best education-job match and the most success in obtaining related jobs. At both the Trade/Vocational and College/Technical levels, Health Services graduates were best able to use their acquired skills; nearly 100 percent were in related jobs, and only a third were overqualified for their jobs.

While field of study determined the extent to which acquired skills were used in the labour market, in general, gender did not. At the university level, females and males were equally likely to be in related jobs, and equally likely to be overqualified for their jobs. However, at the College/Technical and Trade/Vocational levels, a higher proportion of females were in related jobs, and a higher proportion of males were overqualified for their jobs.

9.0 Further Studies after Graduation

Since graduating in 1986, many graduates pursued further studies.[16] In fact, nearly one-half of Undergraduate Degree holders had pursued further studies since graduation in 1986. College/Technical graduates were somewhat less likely to have pursued further education at 38 percent and Graduate Degree and Trade/Vocational graduates, at approximately one-third, were the least likely to have pursued further education.

A much smaller proportion, however, had actually completed further studies by May, 1988. Among graduates who had completed requirements for further studies, Graduate Degree and Trade/Vocational graduates were the most likely to have completed them (16 percent), while Undergraduate Degree and College/Technical graduates were the least likely to have completed them (13 percent).

The most frequently obtained new level of certification varied according to certification level. Over one-third of Graduate Degree, Undergraduate Degree and College/Technical graduates obtained Undergraduate Degrees, while half of Trade/Vocational graduates obtained another Trade/Vocational diploma or certificate.

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[16] The question was "Since completing your program in 1986, have you taken any education or training programs leading to any degrees, diplomas, certificates, or licences?"